

SEPTEMBER 1959

Industrial Development and manufacturers record

THE NATIONAL GUIDE TO INDUSTRIAL PLANNING AND EXPANSION



Mead President D. F. Morris (left), Chairman H. E. Whitaker, and Director Clarence Francis talk over plans in the company's "Library of Ideas." The story of Mead's rapid growth is told in a special report on page 33.

AREA FEATURES

Fresno County, California—
New Western Discovery ...page 17
Oklahoma—A Fresh Approach to
Industrial Growthpage 41

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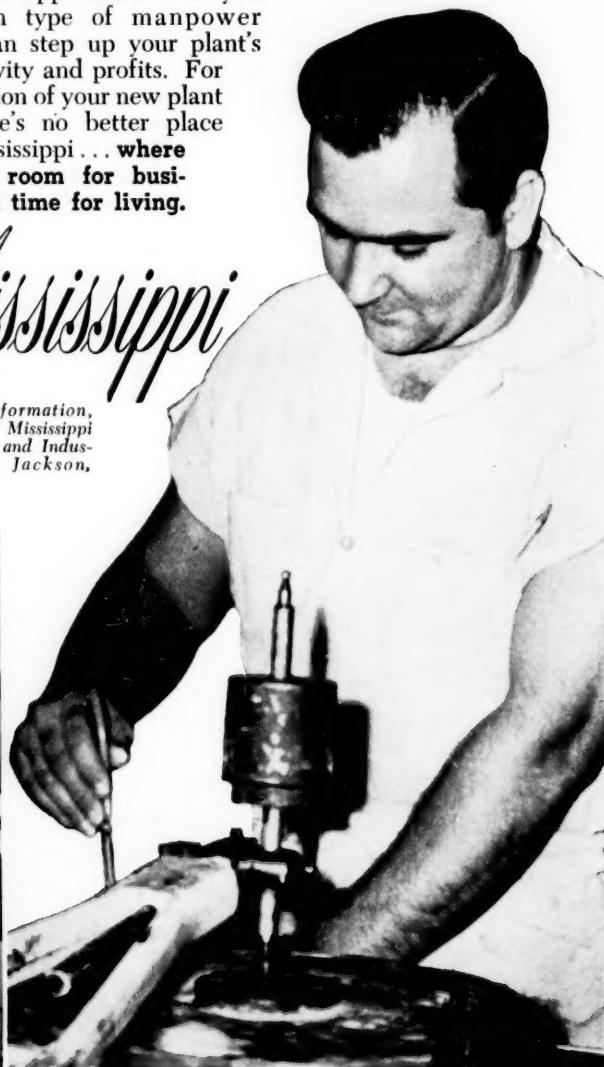


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INDUSTRIAL DEVELOPMENT

and manufacturers record

BPA

Volume 128 September 1959 Number 10

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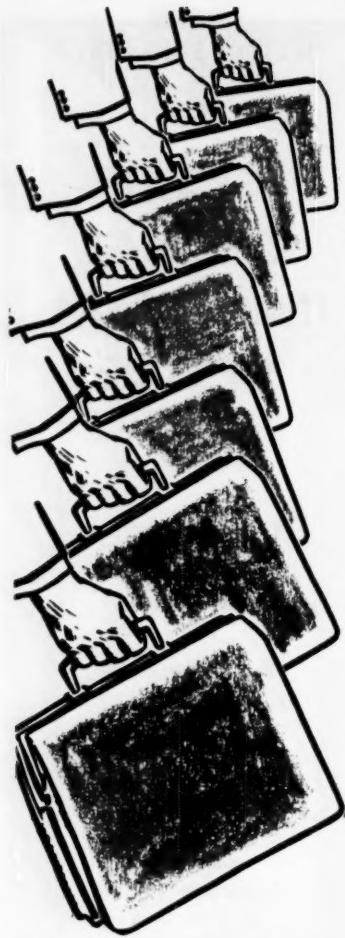
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IN ID/MR... OUR OPINION...

At the beginning of the summer your eager editor loudly announced to the office staff "next three months I'm going to cover the whole country—see what's going on out there!" Now, with the Cessna in the shop for another 100 hour check, we can pause to see just how foolhardy we were.

In what we considered to be an heroic effort for a fast-middle-aging man flying a slow airplane, we covered about 40 states and a small chunk of Canada. We talked to several hundred key businessmen, developers, government officials, and community leaders. We helped announce a new plant in Maine, kicked off Frontier Days in Cheyenne, and celebrated the Centennial in Oregon.

We ducked golf balls from a practice driving range on the airstrip at Staten Island, battled a dust storm into Minneapolis, braved hail over Iowa, and wished for oxygen over mountainous Western Montana. Twice we met a friendly bulldog named "Mighty Ugly" who hangs around the gas pumps on the strip at Goodland, Kansas. Once we flew all the way from Oklahoma City to Atlanta without losing sight of the bane of our existence—summer thunderstorms.

We found a few places where people obviously were not on their civic toes. But our travels served mainly to reinforce our belief that there are great opportunities in all sections of this country.

If Mr. K. from Moscow takes an objective look, we're sure he'll conclude that this country is big, strong, strange, and wonderful.

We found resurgence of interest and spirit in the older areas of the East, continued confidence in the Midwest and South, enthusiasm in the Southwest, and optimism for the long pull in the Northwest. Canada was a particularly bright spot. To no one's surprise we found that parking problems are just about universal and almost everyone is concerned about the steadily-mounting cost of government.

While broad interests are similar, we were reminded that development in each area logically follows slightly different lines. No expansion planning program should be a carbon copy of another in another section!

This is particularly true in the Western areas where large population centers stand as islands separated by vast undeveloped spaces. Here, emphasis must be on minerals exploration, water development, power generation, and refinement of raw materials.

But this does not mean that opportunities do not exist in all areas. In Pierre, South Dakota, geologist Bob Miller told us about new manganese and iron ore



On his recent flying trip to the Northwest, I.D. Editor H. M. Conway, Jr., had interesting and informative chats with a number of development leaders including (left to right) Randall Klemme, Omaha; Orland Mayer, Boise; Bob Miller, Pierre, and Buck Buchanan, Cheyenne.

OPINION

projects. In Boise, utility exec Orland Mayer described an impressive concept of valley development. Near the Great Salt Lake we saw mushrooming new chemical and electronics industries, and a fast-growing industrial center.

In Omaha, veteran developer Randall Klemme outlined a bold area program as fine in professional concept as we've seen anywhere. Standing in his office built on piers over the harbor at Coos Bay, port manager Bob Herrington described site development which will bring big new industry to the Oregon Coast. State official Julius Jensen gave us another earful in Portland.

These and other exploratory conversations served to set up a number of editorial features for the coming months. We'll be giving you the details on the more impressive areas in future issues.

* * *

If possible, competition for industry got even hotter during the summer. The Mayor of Detroit accused the Governor of Tennessee of "a barefaced attempt to steal industry from Michigan." And the auto races at Indianapolis were enlivened by broadcast commercials advertising the fair tax situation in Indiana—all this while the Illinois legislature was busy debating higher corporate taxes.

In Hawaii, Henry Kaiser was getting his new cement plant okayed at a hectic zoning hearing where he charged opponents with trying to "bamboozle" the official body. In Wisconsin a bishop asked for five days of prayer to get a firm to change a relocation decision prompted by labor trouble.

* * *

The Fantus Factory Locating Service has released a report which compares cost of doing business in large cities and smaller areas—and New Yorkers will not be pleased. According to the Fantus study, a corporation employing 500 production workers on New York City, doing a nationwide volume of \$6 million per year, "would operate in New York under a severe economic penalty. Costs of inbound and outbound transportation, labor, fringe benefits, plant overhead, utilities and taxes, might well be \$1 million higher than at some other location" the report said.

* * *

Briefs: There's an aggressive development program on the Island of Guam. Stanford Research Institute (on whose development specialists the sun apparently does not set) has issued a bulletin covering development opportunities on the island. . . . Congratulations to Dow Chemical on its \$2.25 million waste control facilities at Midland, Michigan. Designed to minimize air and water pollution, the project is a shining example of corporate citizenship. . . . We object strenuously to the Small Business Administration definitions of "small business." Their latest bulletin recognizes as small business firms employing as many as 250 workers. Actually, the SBA should be redesignated as "The Middle-Sized Business Administration."

—H. M. C.



Where is it? Continuing his old trick of flying with one hand whilst taking pictures with the other, I.D.'s editor has come up with another unidentified aerial shot. The first reader to name this spot will get a free subscription.



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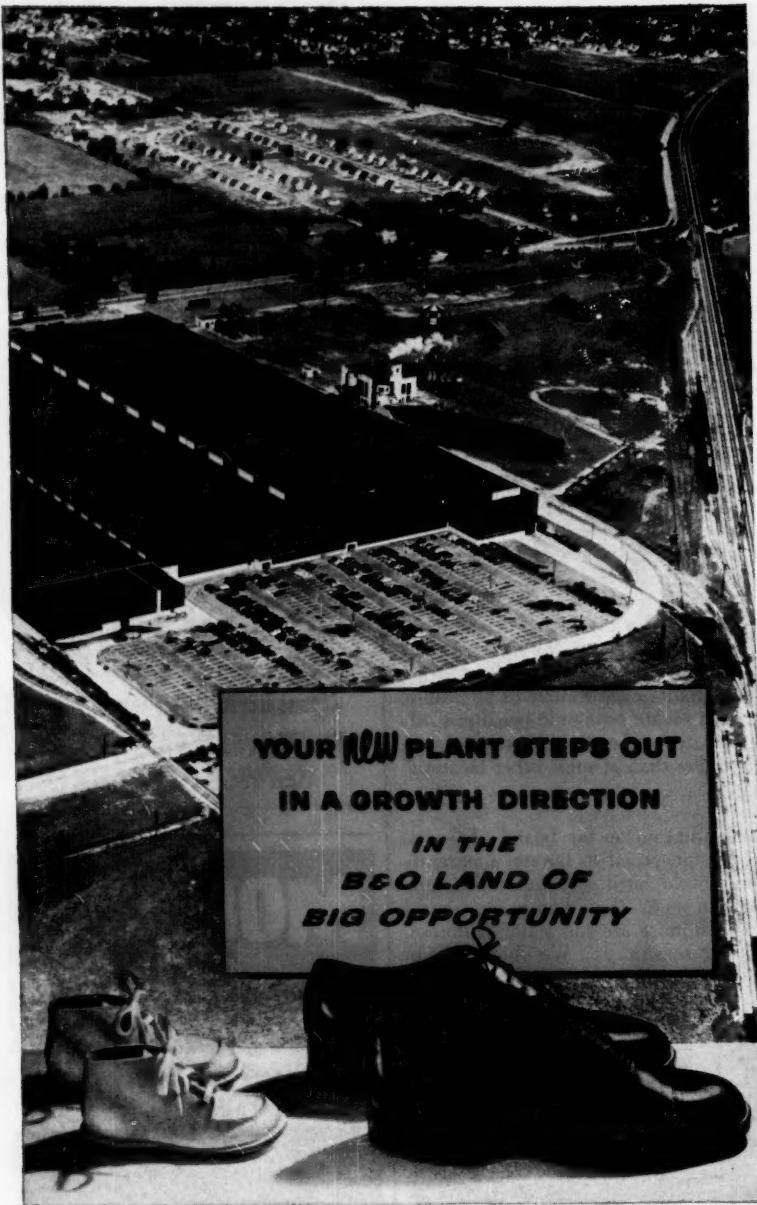


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SIRS: While perusing through our latest edition of INDUSTRIAL DEVELOPMENT, June, 1959, we noticed a small section devoted to listing some of the plant location reports of which reprints are available. We would appreciate the reprint that covers the area of Charlotte, N. C. dated February 1957.

We look forward each month to your wonderful magazine and find it to be probably the most beneficial publication that we receive. Keep up the good work

G. A. MOSER
General Chemical Division
Allied Chemical Corporation
Charlotte 1, North Carolina

Sirs: Congratulations on your fine article on the Ohio River Valley in your July issue.

I am president of Parkersburg Property Management Company, Parkersburg, West Virginia . . . and my company there has several industrial sites and is interested in further developments there.

I would very much like to have three copies of that issue . . .

ALBERT B. WOLFE
53 State Street
Boston, Mass.

Sirs: Heartiest applause for your wonderful article in July ID on the Ohio Valley.

All of us on the B & O are delighted at the scope, breadth and fairness of your appraisal and for your canny use of Gayle Arnold's unique and personal commentary as your lead-off and sceneretter . . .

Thanks . . . for that wide-angle lens on a wonderful subject.

W. H. SCHMIDT, JR., Director
Public Relations
Baltimore and Ohio Railroad Co.
Baltimore, Maryland

Sirs: I read your lead editorial in the July issue with somewhat mixed sentiments. While I agree that there is some reason for "concern about unethical and unprofessional practice in the development world," I do not believe that this concern should be necessarily directed toward the so-called "4-way" operators unless it is obvious that one or more of their operations are being conducted under subterfuge.

If such an organization is made up of qualified individuals in their chosen field and they conduct their operations under a code of ethics acceptable to honest developers, then there can be no reason why they should not openly operate as community developers as well as factory locators. Who would know more about the specifics of a particular region than those who have made concentrated economic studies of communities in the chosen area?

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LETTERS

There are many communities whose budgets will not allow for the hiring of professional industrial development personnel. However, these same communities may be able to retain a community survey or development organization who in turn can assemble factual information on that community, help with the preparation of promotional material, and aid in the formation of a local industrial development team.

Frankly, I can see nothing wrong with the organizations criticized in your editorial as long as they make it plainly understood to the community and to the prospective industry that they are in the business that you described. They, of course, should not promise a community they will get an industry as a result of any study made and, on the other hand, the prospective industry should be told of any communities which have been studied and surveyed by the organization.

If we are to believe what we as professional developers say, industry locates a plant on the basis of economics not politics. It is my belief that a well financed state government agency is better equipped to furnish facts for the entire state—to spend money for advertising the attributes of that state and, at the same time to offer an objective presentation to a prospective industry than any single political subdivision thereof. And, furthermore, I think we will all agree that there is always a great amount of politics within some civic organizations whether they be state or regional.

There is a place, of course, for all types of development agencies. We can only hope that the agencies will continue to upgrade their efforts and spend as much time trying to service industry as they do in waving a flag on what they have done . . .

KODER M. COLLISON, Manager
Ind. & Bus. Expansion Dept.
Dayton Area Chamber of Commerce
Dayton, Ohio

► I.D. is happy to give space for Mr. Collison to air his views. Perhaps it was not made quite clear in our comment that we have no quarrel with organizations or firms that happen to be serving several clients in a development program. But, we reiterate that a firm cannot ethically, in a single transaction, serve and collect from several clients whose interests are obviously conflicting.

Congratulations are in order to David F. Hyde of La Crosse, Wisconsin, vice president of La Crosse Trailer Corporation, who was the first reader to identify correctly the picture of Winona, Minnesota, which appeared on page 3 of the July issue of I.D. Mr. Hyde has been presented a complimentary subscription of the magazine. A new unidentified picture is on page 3 of this issue, and readers are invited to try their hand on that one.

September, 1959

5



See

Index!

Virginia's State-wide
Industrial Exposition
during
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Sept. 30, Oct. 1, 2, 3

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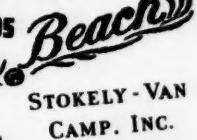
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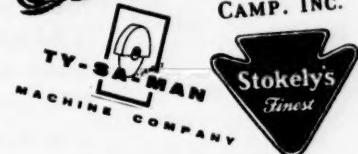


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HOW VULNERABLE

The importance of dispersal, a factor which too few industrialists have taken into account, is brought into sharp focus in this report on what could happen to concentrated population areas in the event of atomic war. Is your site in a primary target area?

IS YOUR SITE?

WASHINGTON. Are you overlooking what could easily be the most important site factor of all? In locating your new facilities, are you considering your vulnerability to enemy attack? In your proposed location would you still be in business after another Pearl Harbor?

These penetrating questions, often in the subconscious of expansion planners, have again been brought into the open by the recent hearings on environmental effects of a nuclear war, held by the special subcommittee on radiation of the Joint Committee On Atomic Energy.

Most thought-provoking testimony was that given by Eugene J. Quindlen, wherein estimates were made of the impact of a theoretical nuclear attack. This was a carefully-planned attack using weapons of appropriate size on selected targets throughout the nation. It is reasonable to assume that a potential enemy would follow similar thinking in selecting targets.

Thus, the accompanying charts are of vital concern to expansion planners who desire to insert the threat of enemy

attack into their plant location equations. While actual bombing results would vary from the theoretical as a result of poor aiming, interception, and other factors, the pattern undoubtedly indicates to some degree the relative vulnerability of various parts of the nation.

Obviously, the big industrial and population centers are prime targets. SAC bases and atomic energy installations are choice objectives. Eastern centers would bear the brunt of the attack, while large parts of the West might go unscathed.

According to the testimony, some 19.7 million people would be killed on the first day of the all-out attack. About 22.2 million others would be so badly injured they would die later. Another 17.2 million would be injured, but would recover.

Of those killed, about 25 percent would have died as the result of radiation alone and about 75 percent as the result of blast and thermal injuries, combined to a great extent with radiation injuries. Of the surviving injured,

of 17.2 million, about 6.3 million would have had blast and thermal injuries and about 10.9 million would have had fallout injuries alone.

This would be a severe blow but even with this weight of attack, about 3 out of every 4 people in the United States would survive. These are the facts of life if a nuclear war should ever come to our borders.

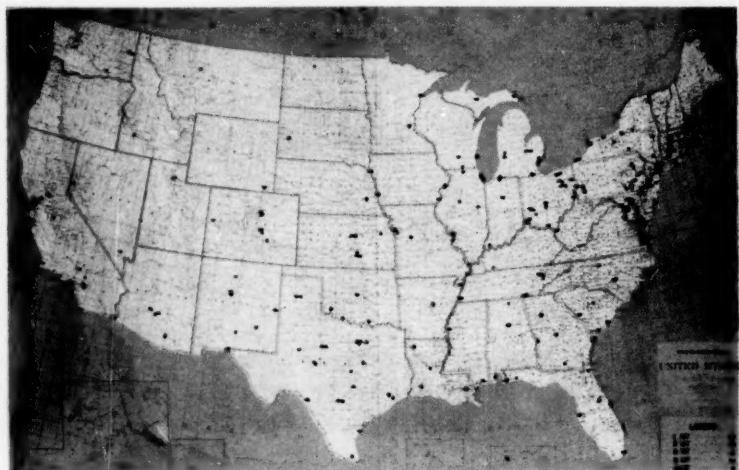
This is the picture which OCDM has been portraying for the American people over and over again in speeches, in pamphlets, on radio, on television, and in the newspapers. This threat and means to meet it were highlighted in the pamphlet, "Facts About Fallout" of which 8 million copies have been distributed since its initial publication in 1958, and in "Handbook for Emergencies" distributed in 42 million copies.

It is reiterated in the new OCDM pamphlet, "The Family Fallout Shelter," which is being distributed in 50 million copies. In the introduction to that pamphlet, Governor Hoegh makes this statement: "In an atomic war, blast, heat

DISPERSAL

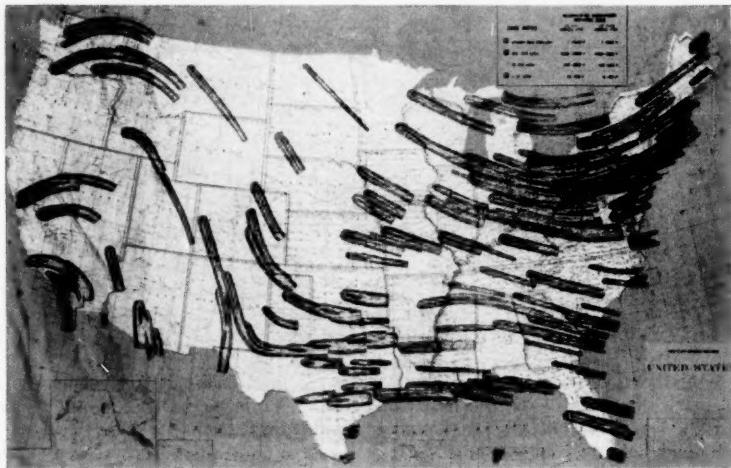
H + 0

The critical target areas, major industrial and population centers of the nation, are shown by the dots on the map. These would be the points that the enemy would most likely seek to strike in a surprise attack.



H + 7 HOURS

Should the nation's chief centers be struck by atomic bombs in an enemy attack, the fallout pattern would look something like this in a matter of just seven hours.



and initial radiation could kill millions close to ground zero of nuclear bursts. Many more millions—everybody else—could be threatened by radioactive fallout but most of these could be saved."

The population figures which were used for damage assessment purposes are those from the 1950 census. Methods of up-dating this population have been developed which can be applied to individual cities based on the actual growth of these cities in the last nine years. Population has increased about 1/6 from 1950 to 1959. The growth in individual areas has been much greater or, in some cases, much less than this.

Meanwhile, for your guidance, here is the list of targets selected, and the weight of explosive which the enemy

might use on each:

Critical Target Areas

2 ten-megaton weapons each: New York City, Chicago, Los Angeles, Philadelphia, Detroit, and Boston.

1 ten-megaton and 1 eight-megaton weapon each: San Francisco, Pittsburgh, St. Louis, Cleveland, Washington, D. C., and Baltimore.

1 ten-megaton weapon each: Minneapolis, Buffalo, Cincinnati, Milwaukee, Kansas City, Houston, Providence, Seattle, Portland, New Orleans, Atlanta, and Dallas.

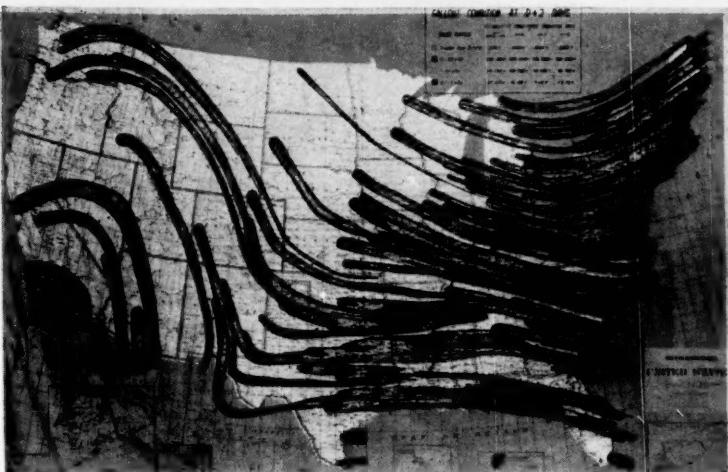
1 eight-megaton weapon each: Louisville, Denver, Birmingham, San Diego, Indianapolis, Youngstown, Albany,

Columbus, Rochester, Memphis, Dayton and Norfolk.

1 three-megaton and 1 two-megaton weapon each: Allentown, Akron, Springfield-Holyoke, Toledo, Wilkes-Barre, Ft. Worth and Hartford.

1 three-megaton and 1 one-megaton weapon each: Wheeling, Syracuse, Knoxville, Grand Rapids, Utica-Rome, Canton, Worcester, Flint, Wilmington, New Haven, Bridgeport, Reading, Peoria, Chattanooga, Lancaster, Daventry, Trenton, Wichita, Erie, and South Bend.

1 one-megaton weapon each: York, Greensboro, Binghamton, Ft. Wayne, Evansville, Waterbury, Rockford, and New Britain.

**H + TWO DAYS**

Within two days after the enemy had made successful strikes at key centers the fallout would have spread out as shown here to blanket a major portion of the nation.

**H + THREE MONTHS**

Even three months after the explosion of atomic bombs there would still be traces of fallout threatening survivors in the broad areas near the target cities.

Air Force Installations

1 ten-megaton weapon each: Altus, Briggs, Castle, Dyess, Barksdale, Ellsworth, Fairchild, Davis-Monthan, Hunter, Lincoln, Lockbourne, Loring, March, Lake Charles, Little Rock, McDill, Carswell, Ramey, Pinecastle, Plattsburg, Shilling, Whiteman, Pease, Walker, Travis, Westover, Charleston, Hamilton, Andrews, and Mountain Home.

1 eight-megaton weapon each: Lowry, Luke, Vandenberg, San Antonio, Francis E. Warren, Offutt, Tinker, Edwards, Nellis, Patrick, Homestead, Suffolk, Webb, Duluth, Sioux City, Otis, Goose Bay, Kirtland, Geiger, Bunker Hill, Paine, Truax, McGuire,

Colorado Springs, Kinross, Wurtsmith, Ladd, Griffiss, K. I. Sawyer, Robbins, Langley.

AEC Installations

1 eight-megaton weapon each: Cambridge, Waterbury, Aiken, Richland, Albuquerque, Los Alamos, Amarillo, Burlington, Kansas City, Oak Ridge, Huntington, Portsmouth, Cincinnati, Grand Junction, Clearwater, Germantown, New Brunswick, Lockland, Shippingport, Berkeley, and Middletown.

Navy and Marine Installations

1 eight-megaton weapon each: Quantico Marine Air Station, Lakehurst Naval Air Station, Pensacola Naval Air Base, and Corpus Christi Naval Air

Station.

Air Installations

1 three-megaton weapon each: McChord, McClellan, Stead, Norton, Hill, Williams, Clovis, Abilene, Laughlin, Smokey Hill, Bergstrom, Kelly, Campbell, Greenville, Chanute, Kessler, and Wright-Patterson.

Air Force, Army, Navy and Marine Installations:

1 two-megaton weapon each: Jacksonville, Oxnard AFB, Ft. Benning, Ft. Bragg, Camp Carson, Ft. Hood, Ft. Lewis, Ft. Meade, Ft. Holabird, Red Stone Arsenal, Pantex Ordnance Depot, Pueblo Ordnance Depot, and Seneca Ordnance Depot.



All America is growing—but the fast-growing youngster of the “family” is the modern South!



Manufacturers:

ARE SKY-HIGH PRODUCTION COSTS TAKING YOU FOR A RIDE?

SOARING PRODUCTION COSTS are a major problem in industry today. And, like being carried away in a rising balloon, the longer you put off doing something about it, the worse the situation becomes. Realizing this, many manufacturers are considering now the double advantage of a move to a *modern* plant in the *modern* South.

They know that a modern, streamlined factory, specifically tailored to their unique production needs, will give them a much more efficient physical layout, regardless of its location. And they find, too, that by placing the new plant in the young and fast-growing South, many additional advantages are automatically acquired.

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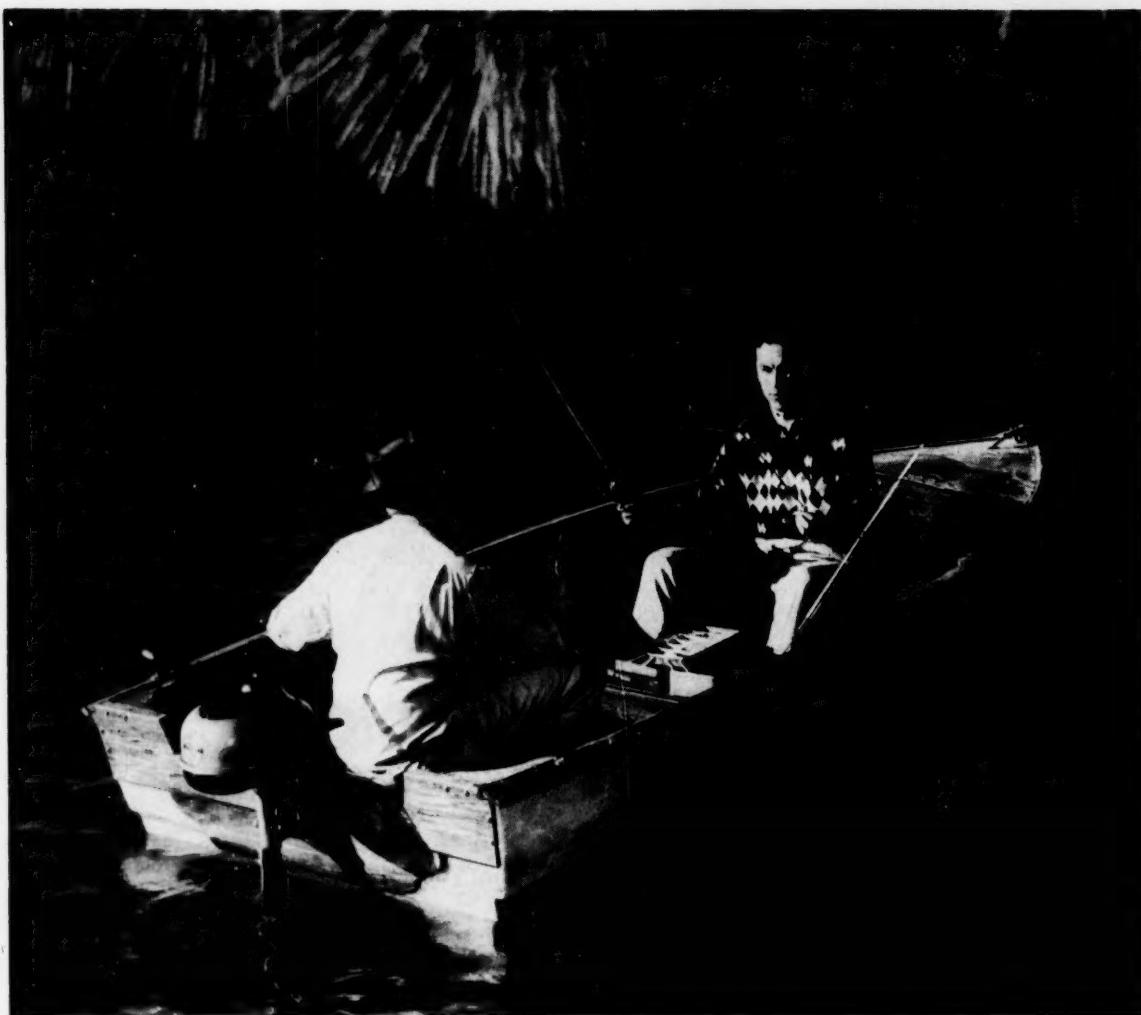
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THE EFFECT OF THE JET ON REAL ESTATE

By D. A. Beck

*Manager, Transport Operations Planning
Boeing Airplane Company*



Boeing Aircraft Photo

THE effect of the jet on real estate, on business patterns and on changes it will cause in the way people live and vacation, will be tremendous.

Actually, the items discussed here are not direct design objectives considered in the development of an airplane. A successful new commercial airplane must be designed to meet Federal Aviation Agency regulations and safety requirements to be compatible with airport operations and facilities, to be more efficient, more comfortable, faster, easier to maintain, and to be more profitable to operate by the airlines.

An airplane that meets these objectives then may find buyers, go into service, and have an *indirect* effect on real estate and business, primarily because it will contribute to an increase in airline traffic. The effect on the way people live and vacation will be more *direct*.

Before discussing these effects, it may be appropriate first to obtain a perspective of air transportation by brief reference to the past growth and predicted future of the domestic scheduled airline traffic as shown in Figure 1.

Although the Wright Brothers first flight was in 1903, it was not until

July 1, 1927, that transcontinental passenger flights began. On that date (six weeks after Lindberg flew the Atlantic) Boeing Air Transport (now United Airlines) started flying the 135-miles-per-hour Boeing 40 transport between Chicago and San Francisco. The airplane carried two passengers and cost \$25,000. The trip took 24 hours and there were 525 customers the first year.

On November 22, 1935, the Pan-American Martin 130 named the "China Clipper" inaugurated trans-Pacific service with a 21-hour flight from San Francisco to Honolulu and continued on to Manila. The first trans-Atlantic passengers on June 28, 1939, crossed from Long Island to Lisbon in 26 hours in the Boeing 314 flying boat named "Yankee Clipper" by Pan American. Last year—19 years later—15 airlines made 35,000 Atlantic crossings.

Air transportation is a new industry—a dynamic new industry which is becoming one of the largest in our country. During 1958, 45 million passengers were flown by the domestic airlines. Since October, 1958, about 250,000 passengers have flown in the 707. Pan American advertisements announce more than 50,000 passengers

have already crossed the Atlantic by 707.

The Federal Aviation Agency predicts a future growth of:

66 million passengers in 1960
93 million passengers in 1965
118 million passengers in 1970

One of the reasons for the great growth of air transportation is that the passenger (the consumer) continually gets more for his money. This is a unique and healthy situation. Besides more comfort and shorter en route time, the cost of trips has been reduced. For instance, a 26-hour trip from New York to Lisbon in 1939 cost \$309. Twenty years later a six and a half hour trip by 707 from New York to London costs \$252.

This transportation bargain and the saving in time is possible because of the jet transport—and is the key to many of the effects which are being and will be realized from jet transportation.

Our jet transport—the 707—is in many respects just another airplane in daily service across this continent and the Atlantic and on the East Coast. It does not appear much larger than the propeller aircraft which preceded it. It taxies in and out of terminal areas. It is operating from airports not specifically designed for the "jet age."

In some other respects it is considerably different from its propeller ancestors. The 707 will cruise at altitudes up to 40,000 feet above most storms and in smoother air. It will carry from 100 to 175 passengers in vibrationless flight at speeds up to 600 miles an hour. Each of these new jets costs approximately 5 million dollars—and we have sold 190 for a total of about 900 million dollars.

The airlines of the free world have invested about 3 billion dollars in pure jet aircraft, and these will surely effect real estate, business, living and vacation patterns.

I am sure various authorities can present convincing facts as to the effect of jet aircraft on real estate values in areas contiguous to an airport. Such a presentation would require a detailed study by one thoroughly qualified in this field.

Land Values

My brief study consisted of calling upon the airport managements at Chicago and Seattle for the history of real estate acreage values in the vicinity of their airports. The following information was obtained:

CHICAGO (O'Hare International Airport)

1946—Original acquisition—Approx. \$400/acre.
1959—Acreage—Approx. \$4,000/acre.
1959—Small adjacent land parcels—Considerably over \$4,000/acre.

SEATTLE (Seattle-Tacoma International Airport)

1942—Original acquisition (few buildings)—\$900/acre.
1946—Highway frontage—\$2,000/acre.
1952-1959—Small lots and large areas—\$3,000/acre (avg.).

An increase in real estate values would be expected, of course, considering the development of the early airports from the sod fields and pastures. At first, airports had no terminal—no traffic control—no permanent employees for the two passengers of a transcontinental flight. The traffic predicted for the age of the jet transports will require more thousands of airport employees and an increase of building around airports as more and more people travel by air.

The trend is indicated today. Airports are not only transportation centers—they have in many instances be-



ABOUT THE AUTHOR

D. A. Buck, Manager of the Transport Operations Planning Section, Boeing Airplane Company Transport Division Sales Department, is an authority on the operations of Boeing 707 jet airliners.

Since the initial flight of the Boeing 707 prototype in mid-1954, Buck has followed closely the entire test program including terminal operations demonstrations and sound-suppressor tests. He is author of two detailed engineering studies on these phases of jet airliner operations.

Buck was born in Denver, Colorado, and was graduated from the University of Colorado with a bachelor of science degree in civil engineering in 1933. He joined Boeing Airplane Company in 1940 after working as an engineer with an architectural firm and on construction projects. He also has had experience in aerial photography.

After joining the Boeing company, Buck was in engineering and preliminary design before joining the Boeing sales team in 1946. He has been active in sales engineering work in connection with all commercial and military transport programs since that time.

come commercial and industrial centers. This trend should continue at an accelerated pace if predictions of a three-fold increase in scheduled airline passenger traffic are realized in the next eleven "jet age" years.

Today many airports have restaurant facilities, shops, banks, car rental agencies, and various services. Some have entertainment and recreational facilities. Phoenix has a commercial office building; Idlewild a 320-room hotel on adjacent property; Miami International which terms itself "a teenage giant" a 200-room hotel in its terminal building. Many airports are airline bases with overhaul facilities, and they handle business aviation which accounts for more flying than the scheduled airlines.

Thousands of people are employed

at airports today and many more will be employed to fill the requirements of the jet transports and the millions of passengers they will carry.

The spectator factor in the "jet age" should not be discounted either. At San Francisco, introduction of 707's by TWA and American has increased the consumption of pancakes in an airport shop by 100 per cent. People come out in droves to watch the 707 operations—and eat pancakes.

One item of concern to many airport authorities is the speed of ground transportation between the airport which may be located at some distance from the city. Some, like Chicago's O'Hare and Washington's Chantilly will have high speed expressways which will shorten the jet passengers ground time. But they will bring a new problem—remote areas from the city will then be close and will be built up with residential developments that will clog the expressways with commuter traffic. And the real estate value of these formerly remote areas will increase as farm and waste land becomes a residential development.

What should be done in preparation for the growth in air transportation in the "jet age"? I believe one of the answers lies in the advanced planning of some of the world's major air terminals. Terminals like O'Hare, Chantilly, Los Angeles, San Francisco, Paris, Hong Kong—to mention a few—are building for the future. They have large areas capable of handling many aircraft and passengers—available for expanded facilities and industries—and large enough to keep homes from being built where they shouldn't be.

Need For Zoning

The other answer, it seems to me, is in an expanded program of intelligent zoning based on the conservative air transportation forecasts for 10-20 or 30 years hence. Historically, land values around airports have gone up. And it is a matter of record that airport sites attract hotels, motels, allied industries, parking facilities—and homes. The only way the jet transport will affect this trend in real estate values is to bring more customers to businesses and facilities that belong near an airport.

The jet transports will—and are—having a direct effect on business patterns and the way people live and vacation.

There are two main reasons for this

JETS AND REAL ESTATE

—one is that comfortable trips can be made at bargain rates. The other is that distance is no longer measured in miles—it is measured in time. The world has become 40 per cent smaller!

A well-known consulting organization has been located for years in a medium-sized midwest city—and is now moving its office to San Francisco. Recently, the head of this organization told me the main reason for this move was that he would be closer—in time—to clients all over the world. For instance, he stated that by frequent non-stop jet he would be closer to New York than by infrequent puddle jumper from the midwest city. Twenty-eight hundred miles is closer than 700 miles—in time!

This is a fact to be reckoned with in many businesses. We have seen movements of business in the propeller age—such as various petroleum industry offices moving to the centralized location and perhaps more desirable climate of Denver. With adequate jet transport service, *any* geographical area may become close to new markets and attract new industries.

I understand certain areas—such as Ireland and Puerto Rico—are attracting new industry with offers of land and low initial tax rates. These areas are getting ready for the "jet age"—Shannon, Ireland is 6 hours by jet from New York; San Juan, Puerto Rico is 3 hours. Piston engine airplane flight schedules show Denver to be 6 hours non-stop from New York and Chicago to be 3 hours non-stop from New York. Thus, the geographical *distances* may be greatly different but the distances in *time* may be the same.

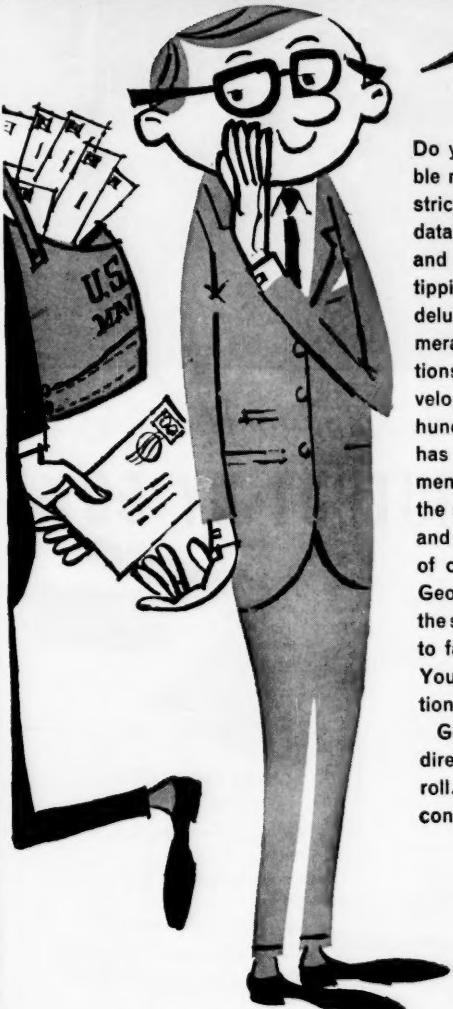
Changing Business Patterns

The pattern of carrying on business is also changing in the jet transport era. Busy executives may now leave Los Angeles at 8:30 a.m., arrive in Chicago in less than 4 hours. After a three-hour business conference, they may leave Chicago at 5:00 p.m. and be back in Los Angeles by 7:00 p.m. for dinner at home.

A perky, attractive stewardess on a recent Paris to New York 707 flight told me how her schedule permitted a round trip flight to Europe every weekend. From Monday through Friday she is a high school teacher in the New York area. This is the "jet age."

The effect of the jet on vacation patterns is limited only by your own imagination. In eight hours a person

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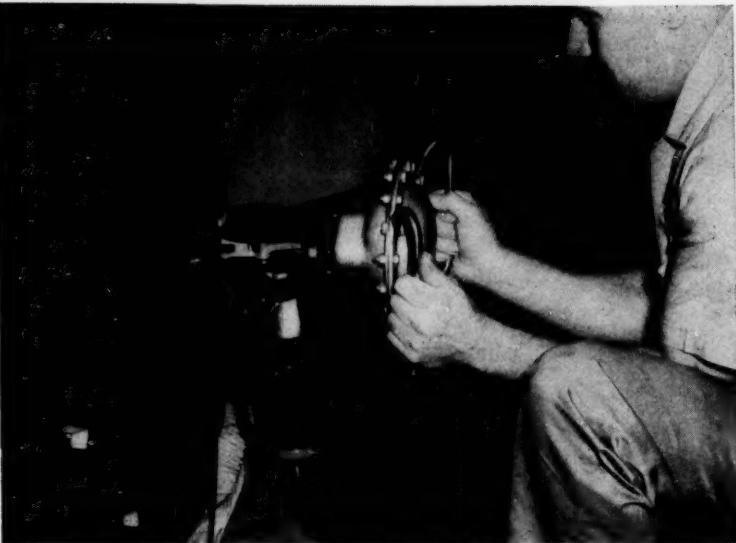
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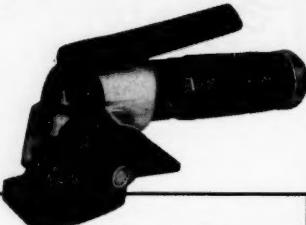


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JETS AND REAL ESTATE

may drive from Chicago to a northern lake for a quiet vacation—or fly to Paris in the same time. He may take a train to Des Moines—or arrive by jet in less time in Phoenix or Denver for a western holiday.

Weekend in Europe?

Pan American reports a tremendous increase in reservations by jet to Europe this summer. They also report numerous instances of long week-end vacations in Europe. For instance, people will leave New York Thursday evening after work, spend Friday, Saturday, Sunday and Monday in Paris. Then the Paris flight leaves at 6:00 p.m. on Monday and arrives in New York at 10:05 p.m. that evening in time for a good night's sleep before work Tuesday. This is happening today.

The effects of the jet on our businesses and lives hold great promise—but only if our communities have jet service.

The domestic airlines are authorized to serve some 600 airports in the U.S. and with their entire aircraft fleets presently offer some 25 billion seat miles per year. Eighty-eight Boeing 707's will be operated domestically within a year and a half which will alone offer 14 billion seat miles per year, and we estimate the 707 will operate into only 30 to 35 U.S. cities. Of course, other jets and turbo-prop types will serve many other smaller cities.

There are actually many airports besides Miami that might be called "a teenage giant," which may bring the advantages of jet transportation to the social and economic life of their communities. Their biggest problem is being assured of jet service and in keeping up with the airport expansion and developments which will be needed to serve this growing industry.

This is a time of change. Just as the railroad train altered the patterns of industry and commerce—and the location of industries and commercial centers—when it superseded the canal boat and stage coach, so will the expansion of air transportation and the 40 per cent shrinkage of distances bring about changes we can only imagine at this time.

But the benefits to be brought by the "jet age" will be those of progress, and the jet should have the good effects of a dynamic, expanding industry on real estate.

DESIGNED AND DRAWN BY **Walter L. Johnson**
GENERAL PLANNING AND ENGINEERING
TELEGRAMS: PLANNERS AND ENGINEERS

Fresno County



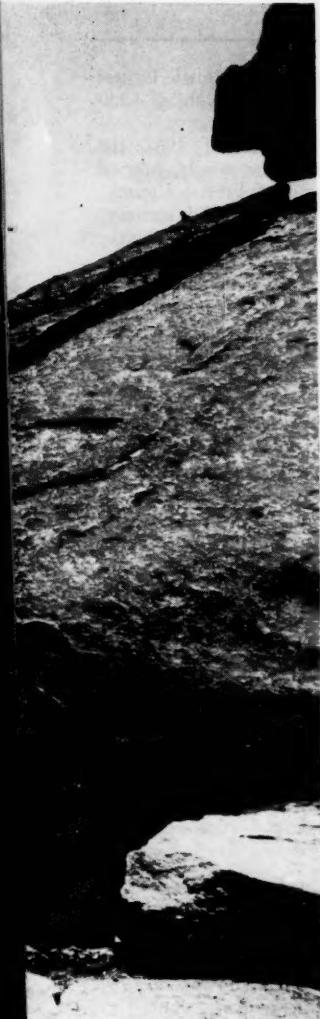
Here is an area worth careful consideration for your Western manufacturing facility. Located in the wealthy San Joaquin Valley, Fresno County offers easy access to the richest markets in the region, uncrowded urban convenience, a large productive labor force, and some of the most impressive recreational facilities in the nation.

GENERAL PLANNING AND ENGINEERING



The snow-covered peaks are part of the "wilderness area" of the Sequoia National Park, Fresno County. The wilderness area is popular with the heartier breed of campers since access can be gained only by foot.

NEW DISCOVERY IN THE



A new star is rising in the industrial sky of the west—Fresno County. What does this, the nation's richest agricultural and recreational county, have to offer you for your west coast plant? This new ID report tells you why the area has been dubbed "America's Newest Industrial Discovery."

By William Pruett

A FEW weeks ago officials of the Dow Chemical Company held a press conference in the offices of the Fresno County and City Chamber of Commerce. The purpose of the conference was the announcement of a new \$2 million polyethylene film plant on a 24 acre site south of the city of Fresno.

The firm had considered over 100 different locations at first. Then the choice was narrowed down to 15. Fresno County was finally picked.

Why?

"Markets," explains William B. Sander, president of Extruders, Inc., a recently acquired Dow subsidiary which will operate the plant. "The proximity of markets was the major reason for coming to Fresno."

Mr. Sander went on:

"We believe the site selected meets our requirements for long range ex-

pansion as well as proximity to present and future markets.

"The availability of utility services, labor pool and rail and truck facilities likewise was another contributing factor."

If you are the president of an important manufacturing firm headquartered in the east and considering your first new facility to serve the west coast market you might give your first consideration to the industrial centers of the Bay Area and the Los Angeles-San Diego areas.

Then if you look a little further you will "discover" that in the central part of the rich San Joaquin Valley there is a bright, progressive county looking toward the day in the not-too-distant-future when it will be the third largest urban area in California—Fresno County.

You may already know that for the

WEST!

FRESNO COUNTY



"The next four or five years will see the greatest industrial growth that the county has ever seen . . ." said Leon Peters, president of Valley Foundry and Machine Works.

last few years Fresno County has been the richest agricultural county in the nation. You may also know that Fresno also has oil and cotton, raisins and wine—but what of its future as an industrial center?

Here's the way one Fresno industrialist looks at it:

"I am very optimistic about the future growth of this area," said Leon Peters, president of the Valley Foundry and Machine Works, Inc.

"The next four or five years will see the greatest industrial growth that the county has ever seen. In fact, the vast industrial potential here is just beginning to be realized by the people."

Mr. Peters paused for a minute and looked out of his window onto the city and valley beyond. "Around here you've got room to expand . . . grow."

The ID reporter asked about labor efficiency. With a twinkle in his eye, Mr. Peters said, "You know, we've had union affiliations around here for years, but I can recall only one brief strike. Off hand, I can't recall what the reason was, but it was settled pretty quickly. Around here we can talk things over if we have a problem."

The friendly, energetic spirit typified by this Fresno County businessman seems to be a way of life—of business—here.

The great western United States is still in early industrial maturity. Men whose fathers and grandfathers fought their way overland to settle and build a new way of life are today looking forward to a brighter future with more enthusiasm than ever.

Explosive growth of the economy and markets of the western United States has generated a new era of industrial expansion on the "other" side of the Rockies. Lying right in the middle of this area is Fresno County, called "America's Newest Industrial Discovery" and boasting almost every factor which makes for the ideal location for your new manufacturing facility.

Pioneer Roots

About 116 years ago John C. Fremont, famed western explorer and his scout, Kit Carson, journeyed southward from what is now the San Francisco Bay area across a long, wide valley. He saw the southwestern part of the valley as an empty desert, spotted with alkali and boasting only sagebrush for vegetation. Making a brief side trip eastward he encountered the eastern mountain region, a wilderness of breathtaking peaks, tall, majestic waterfalls and limitless carpets of wildflowers.

This region comprises what is today Fresno County, rapidly approaching

its goal of being the third largest metropolitan area in the state of California.

During the summer of 1957 the plant manager of the newly opened Pet-Ritz plant said of Fresno County, "An ideal climate, beautiful scenery, wonderful people . . . good schools, splendid recreational facilities!"

A lot has happened to the Valley during the last hundred years to generate such praise. The story of Fresno County and its people form a background made up of high spirit, hard work and an abiding faith in the future of the west.

The area we ask you to consider here is located approximately halfway between San Francisco and Los Angeles. It is almost at the center of the vast San Joaquin Valley. Its citizens proudly point out that this equidistant factor has kept them relatively independent of both huge metropolitan areas and encouraged them to develop self-reliance and build a third economic center linking the state together. As one businessman told this reporter, "We don't feel that we have to trade on either Los Angeles or the Bay Area to prove our value. We can offer all the advantages of Southern California living with very few of the disadvantages."

The Fresno County Economy

For many years Fresno has led all the counties in the Nation in value of farm production. Despite the recent increased industrialization, agriculture and industries dependent upon it dominate the economy. Grapes and cotton are by far the most important farm products, together accounting for over 40 percent of all value of output. The topography: hills and upland valley in the east, level fertile valley floor in the central and west central portions, and low hills in the west provide such a variety of soils and climate that wide diversification has been attained. Tabulated on the accompanying chart is the pattern of development in recent years. Important crops not listed separately with 1958 farm valuations, are barley, \$23.8 million; alfalfa, \$18.1 million; melons, \$10.7 million; peaches, \$11.9 million; figs, \$4.3 million, and oranges, \$4.2 million.

Minerals and Mining

Fresno County's leading mineral products are petroleum, natural gas, and natural gasoline. During 1956 the

county was the fourth largest oil producer in the State with the main production coming from the Coalinga and Kettleman Hills fields. More than 2,500 wells are producing, and drilling of new wells is proceeding at a normal rate.

During 1956, \$123.5 million worth of minerals were produced in the county. Petroleum accounted for \$104.4 million of this, but large quantities of sand and gravel and miscellaneous stone were also mined. Brick and hollow tile are produced from clay at Fresno and a number of other minerals were mined during the year. During 1957 Fresno County was an important producer of chromite. There are known deposits of copper, diatomite, limestone, arsenic, bismuth, tin, asbestos, bentonite, graphite, and volcanic ash in the county. At Hoffman Meadow, in the northern part of the county, two peat bogs have been found which contain uranium.

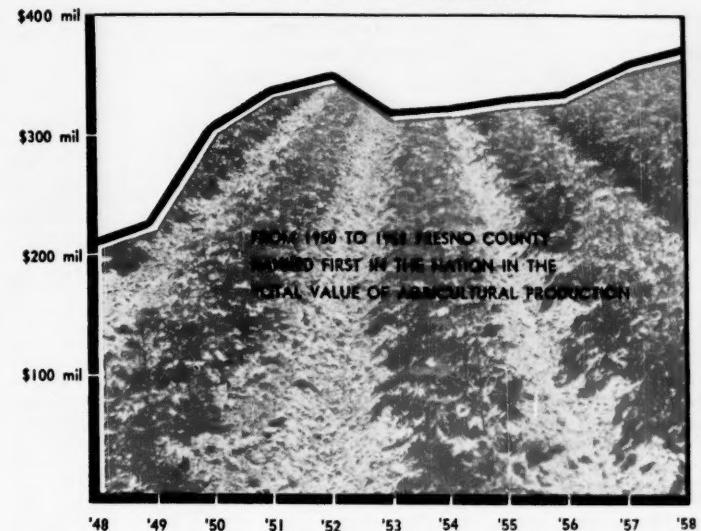
Manufacturing

This report is concerned primarily with the factors which you need to know in order to evaluate Fresno County for your new west coast plant site. Many of these factors are related to the county's agricultural products and industries which process them.

Manufacturing of many types has gained considerable momentum during the past few years. For instance, between the years of 1947 and 1954 the Census of Manufacturers showed a gain of 131% in manufacturing payrolls leaping from \$21.9 million to \$50.7 million. Actual value added by manufacture jumped 105% from \$57.2 million to \$117.1 million. Much of this growth is related to expanding markets and the unusually good geographical advantages of the county. A number of firms formerly maintaining warehouse facilities have expanded their Fresno County operations to include manufacturing. During 1947, for example, 12 new industries with a capital investment of \$5.6 million were established in Fresno County. During the same period, 86 firms expanded existing facilities adding capital investments amounting to \$5.9 million.

During the first quarter of 1959 four major new plants came into Fresno County. The largest of these was the Dow plant mentioned earlier. Actual location of the plant is the Fresno Industrial Sites Foundation industrial park. The plant will have 70,000 square feet of floor space and

AGRICULTURAL CROP VALUE IN FRESNO COUNTY



Product group	Value of production (000)		
	1947	1953	1958
Grapes	\$ 39,777	\$ 56,573	\$ 93,813
Other fruits and nuts.....	10,242	23,221	39,390
Cotton	43,296	84,667	84,562
Other field crops.....	31,456	67,209	65,923
Truck crops	12,065	16,819	18,384
All other	28,601	65,037	68,926
Total	\$165,446	\$313,522	\$370,998

will occupy initially four acres, with twenty additional acres reserved for future expansion.

Another significant new facility acquired by the county during the first quarter of this year was the General Cable Corporation's \$500,000 manufacturing warehouses and offices on a 15-acre site in Sanger. The plant will employ initially 100 people and manufacture electrical wire and cable.

During the first four months of 1959, new plants and expansions in the county created 221 new jobs with about \$2.5 million in investments added.

The major industry groups in the county are canning and packing firms which account for about half of total employment. Principal products in these operations are wines and brandies, raisins, packed meat, poultry, dairy products, olives, and many

canned, fresh and frozen fruits and vegetables.

Ranking second in manufacturing employment is the transportation equipment industry.

Assuming more and more importance are lumber and wood products. As new tracts are opened up, more opportunity is available in expanded production. Related to raw lumber production is the production of a large amount of boxes, pallets, barrels, cabinets, doors and other milled products.

A number of other industries are represented including machinery, printing and publishing, petroleum, and chemicals including Valley Nitrogen's giant new \$9,000,000 plant at Helm producing anhydrous ammonia. For a detailed breakdown of employment by industry groups please refer to the chart which appears on page 22.

EMPLOYMENT—LEADING MANUFACTURERS

3RD QUARTER 1957
(Ranked by Payroll)

	Number of Firms	Employees	Payrolls
Food & Kindred Products	117	6,712	\$ 6,240,227
Transportation Equipment	14	2,349	3,228,509
Lumber and Wood Products	37	1,389	1,688,539
Machinery (except electrical)	37	1,204	1,443,287
Chemicals and Allied Products	15	782	1,079,756
Printing and Publishing	45	724	920,516
Total	265	13,160	\$14,600,834

BUSINESS PATTERNS 3RD QUARTER 1957

	Number of Firms	Employees	Payrolls
Mining	51	1,039	\$ 1,594,347
Manufacturing	374	15,168	16,964,452
Construction	657	5,698	8,332,128
Utilities	303	6,559	7,953,628
Trade	2,972	8,911	23,455,021
Finance	360	2,963	3,340,249
Service	1,727	8,236	6,455,201
Other	36	63	44,028
Total	6,573	66,003	\$69,124,888

	1956	1957	% Change 1956-57
	(In Thousands)		
Food Group	\$101,404	\$109,431	7.9
Eating-Drink. Places	28,364	29,620	4.4
General Merchandise	41,828	42,598	1.8
Apparel	23,596	24,113	2.2
Furniture-Household Appl.	22,975	21,800	-5.1
Automotive	64,900	69,071	6.4
Service Sta. & Parts	44,200	47,091	6.5
Lumber, Hardware & Implements	49,143	48,956	-0.4
Drug Stores	12,550	13,786	9.8
All Other Retail	64,389	67,472	4.8
Total	\$453,349	\$473,938	4.5

The Market Picture

The comments above reflect location factors relative to industrial markets in the immediate Fresno County area. Naturally you will consider *location* in respect to specific markets for products and availability of raw materials.

Before examining the national advantages of a Fresno County location, let's pause for a brief look at the consumer markets and population characteristics of the immediate region:

Fresno County, as the central distribution area of a specific part of California, serves locally four counties—Fresno, Kings, Madera and Tulare.

The best population estimates of this market area at the beginning of 1959

put the total population at slightly more than 570,000. The total retail sales to this population reached more than \$750 million.

The *Fresno Bee* in its 1959 Consumer Analysis reported that the effective buying income of Fresno County rose from \$360.7 million in 1948 to more than \$597 million in 1958.

Taking the state of California alone as a market, economists have estimated that it will be the nation's most heavily populated state by 1965. This estimate is based on the state's rate of growth since 1940 which is 104% as opposed to the national average of 29%.

A comprehensive study of the Fresno Metropolitan Trade Area is now under way by Victor Gruen As-

sociates. The research firm was retained by the City of Fresno, the "Fresno Hundred Percenters" (a private group of downtown businessmen, property owners and merchants), and by the Redevelopment Agency of the City of Fresno in the fall of 1958 to study the future and make plans for the redevelopment of the entire central area of the city of Fresno. Some of the facts developed to date in the study are pertinent to this report.

The accompanying charts were prepared by the Division of Business of the Fresno State College and represent findings presented in the Gruen study.

The first tabulation projects population for twenty-one years in the Fresno Trade Area. Growth in Fresno County is seen to be more rapid than other counties in the area. Thus, while only 51.02 per cent of the Trade Area Population resided in Fresno County in 1958, it is estimated that 57.05 per cent will be in the county by 1980.

The second tabulation presents estimates of buying power (presented in terms of constant dollars of 1958 buying power) in the area for selected years between 1958 and 1980. Estimates are based on data presented in Table One and the following assumptions: (1) buying power is estimated to be 70 per cent of disposable personal income; (2) "real" incomes (living standards) will rise 1.8 per cent per year; (3) an additional amount equal to 7 per cent of personal income will be spent by business firms in retail stores and shops.

The rate of growth of buying power exceeds that of population for the entire Fresno Metropolitan Trade Area and for each of the counties included in the area. This, of course, follows partly from the assumption (2) above, but as the Gruen study states, it is also "... due to the [Fresno] area exerting itself as a true metropolis and regaining certain of its sales which are presently lost to the San Francisco and Los Angeles metropolitan areas."

There are several reasons why Fresno County offers much for manufacturers seeking to reach this mammoth market. First, even though the county is within convenient overnight surface freight distance from both the Bay Area and the Los Angeles area, it is not congested. Having planned for long-range growth, Fresno Countians can observe a growing population without experiencing "standing-room-only" problems. Second, modern high-

ways and transportation services are developed to accommodate considerably more traffic than is immediately foreseeable. In fact, plans for additional facilities are more than enough to meet even the most exacting demands. Third, there is no power problem. Each of these factors will be treated separately later.

Colorful History

The county has an interesting and colorful history. It has experienced much the same sort of turbulent, rapid growth which is a characteristic of the west.

The original citizens of the county were Yokut Indians. Originally numbering over 10,000, the Yokuts were a healthy, energetic people enjoying a primitive, though efficient, society. The coming of the white man marked the virtual extinction of the Yokuts who eventually succumbed to many of civilization's ills. Today only a few remain.

The actual creation of the county did not occur until April 19, 1856 when the California legislature formed it from parts of Merced and Mariposa Counties. Small settlements of gold miners had been established along the streams and rivers. The largest of these settlements was Millerton, which was proclaimed the county seat.

The history of these early days reads like a novel of the wild west. Progress was debatable, though growth was swift. A succession of hard-case sheriffs and harder-case outlaws roamed the Valley floor. However this era was rather mercifully short-lived and a succession of floods, and outraged citizens imposed order and peace in the County.

Fresno County's real era of progress opened with the establishment of a Central Pacific railhead and telegraph office. It was named "Fresno Station." Before long, citizens of the area began to recognize the wisdom of having the county seat adjacent to the railroad and the new Fresno was brought into being in 1874. The city was officially incorporated in 1885.

The colorful, aggressive spirit which is part of the county's history is very much in evidence today in the "boomtown" atmosphere and enthusiasm of the people.

Transportation

Geographical characteristics of Fresno County have dictated an unusual transportation network. Both

GRUEN STUDY TABULATIONS

TABLE I

Present and Projected Population, Fresno Metropolitan Trade Area, 1958-1980

	1958	1965	1970	1980	% Increase 1958-1980
Fresno County	344,400	442,000	503,000	650,000	88.73%
Tulare County	151,200	165,000	179,000	212,000	40.21%
Merced County	86,900	104,300	117,000	142,000	63.41%
Kings County	47,800	64,000	72,000	85,000	77.82%
Madera County	39,910	41,200	42,200	44,000	11.75%
Mariposa County	4,870	5,400	5,500	5,700	17.04%
Total	675,080	821,900	918,700	1,139,300	68.77%

Source: Victor Gruen Associates, Central Area—Fresno, California, Vol. I, Research and Basic Planning.

Population growth is projected for a twenty-year period. The counties tabulated are considered part of the Fresno Trade Area. Note that while only 51.02 per cent of the total Trade Area population now resides in Fresno County proper, by 1980 it is estimated that 57.05 per cent will be in the county.

TABLE 2

Buying Power—Retail Sales to Individuals and Families in the Fresno Metropolitan Trade Area (000), 1958-1980.

	1958	1965	1970	1980	% Increase 1958-1980
Fresno County ...	\$404,479*	\$ 594,502*	\$ 718,333*	\$1,065,674*	163.5%
Tulare County ...	174,108	213,937	250,639	340,792	95.7%
Merced County ...	100,065	136,659	163,826	228,266	128.1%
Kings County ...	55,040	82,982	100,817	136,635	148.2%
Madera County ...	45,957	53,420	59,088	71,693	56.0%
Mariposa County ...	5,608	6,315	7,702	9,161	63.4%
Total	\$785,257	\$1,077,815	\$1,300,405	\$1,852,221	135.9%

*Dollars of 1958 purchasing power.

Source: Victor Gruen Associates, Central Area—Fresno, California, Vol. I, Research and Basic Planning.

These estimates of buying power are presented in terms of constant dollars of 1958 buying power. It is assumed that buying power is 70 per cent of disposable income and living standards will rise by a factor of 1.8 per cent per year. Part of the total represents retail purchases of business firms.

the eastern and western parts of the county are mountainous and have caused most of the population and industry to gravitate toward the central or narrowest part of the area. A highly developed system of national, state, county and city roads is designed primarily on a north-south grid connecting all parts of the area conveniently. The major north-south highway, U.S. 99, is a multilane expressway and construction of a full freeway through the county is nearing completion. State highways 41, 145, 168, 180, and 198 radiate from the metropolitan center to the national parks, the Sierras and to the coast. In the county there are nearly 500 miles of state highways and about 4,000 miles of county roads of which about one-fourth are primary roads. The projected super highway No. 5 will tra-

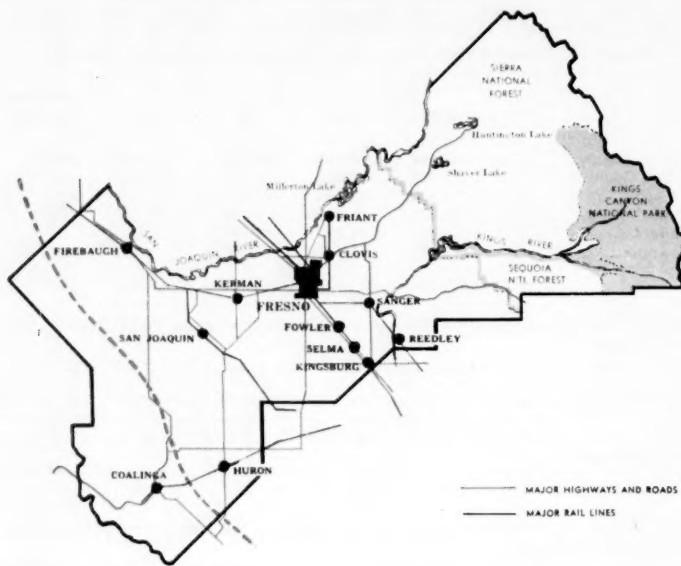
verse the west side of the county in a direct north-south line between Los Angeles and San Francisco. Twenty-one major trucking firms operate frequent scheduled and non-scheduled services.

Both the Southern Pacific and Santa Fe Railroads run main lines through the county. Connections with a series of branch lines make virtually every community in the county accessible by rail.

Three municipally operated airports in addition to thirteen private fields make Fresno county unusually air-minded. Two scheduled airlines operate out of the Fresno municipal airport—United Airlines and Trans World Airlines. In addition three feeder lines are currently applying for C.A.B.'s permit for service within the area. The main county airfield is new and well

FRESNO COUNTY

TRANSPORTATION NETWORK



The rail lines represented by black lines are both the Santa Fe and Southern Pacific. Only essential highways (in color) are pictured here. Actually a complete network of east-west, north-south roads exists to connect every part of the county. Most of the eastern part of the county is National forest and park land. The recreation areas are easily reached. Shaver Lake, for instance, is less than forty miles from the center of Fresno.



Just a few years ago this area was vineyards and orchards. Extraordinary demand for housing made possible this residential area surrounding the Manchester Shopping Center. This corner, Blackstone and Shields, is about three miles north of the business center of Fresno.

maintained, capable of handling the largest jet transports. A \$2,406,000 expansion of present air terminal facilities is already under way.

Two bus lines, Greyhound and Continental Trailways, operate a total of 101 schedules daily from Fresno.

The city of Fresno, in the center of the county, is 218 miles north of Los Angeles and 183 miles south of San Francisco. The seaport terminal of Stockton is 122 miles to the northwest.

People and Progress

Labor means people. An energetic, industrious people make an efficient productive labor force. Regarding the people in Fresno County, Vern Redman, an official of the Pacific Gas and Electric Company, said:

"We feel that, aside from many advantages related to location, industry finds an exceptionally productive labor force here in Fresno County. There are two basic characteristics which contribute to this:

"First, a good labor relations history with a very low strike rate. Labor officials are civic minded and display a strong spirit of cooperation in negotiations.

"Second, workers are productive. Many of the people here have an agricultural background and an independent spirit. That means they are willing to work and will produce a day's work for a day's pay."

You may be particularly interested in the large pool of female labor available on a seasonal basis. The food processing industries have trained many women to do skilled work and they are not considered part of the "necessary" work force—that is, they are not the chief wage earners in their families.

In July, 1958 the California State Department of Employment reported that the total county employment was about 65 percent male and 35 percent female.

Construction and transportation industries have a high degree of unionization. Manufacturing is primarily AFL-CIO trades. Smaller communities outside the immediate Fresno metropolitan area are non-union for the most part.

Many trades are developed in vocational schools. A well-developed program of shop and apprentice training exists between industry, the Fresno school system and labor organizations.

FRESNO COUNTY WAGE RATES

The wage rates shown here were compiled and furnished by the Fresno office of the California State Department of Employment. They are indicative only of the *general wage structure* and show only those schedules prevailing as of July 1, 1959.

JOB CLASSIFICATION	RATE	JOB CLASSIFICATION	RATE
Clerical			
Accountant, Junior	\$315-\$420	Sheet Metal Workers	\$3.65
Accountant, Senior	470- 680	Shinglers	3.71
Accounting Clerks	260- 365	Steam Fitters	4.05
Bookkeeper, Female	260- 365	Teamsters:	
Bookkeeper, Male	315- 420	Dump Truck	2.75 -3.35
Bookkeeping Machine Operator	240- 290	Transit Mix	2.865-3.125
Calculating Machine Operator	235- 260	Tile Setters	3.50
Cashier	195- 260	Welder (Ironworker)	3.85
Clerk Typist	235- 290		
Intermediate Typist	235- 305	Electrical	Hour
Intermediate Stenographers	235- 340	Electrical Assembler (Men and Women)	\$1.50-\$1.90
Junior Stenographer	210- 260	Maintenance & Industrial Electrician	3.50
Key Punch Operator:			
Trainee	210- 250	Food Processing	Hour
Experienced	235- 290	Male Workers	\$1.83-\$2.30
Payroll Clerk	285- 365	Female Workers	1.67- 2.01
PBX Operator-Receptionist	220- 285		
Secretaries	290- 365	Garment (Women)	Hour
Executive Secretaries	315- 500	Alteration Women	All piece work
Senior Clerks	315- 365	Sewing Machine Operator	\$1.00 per hour guarantee
Senior Typists	245- 315		
Senior Stenographer	290- 340	Manufacturing & Related Skills	Hour
Tabulating Machine Operator:		Unskilled (Female)	\$1.00-\$1.75
Trainee	210- 250	Unskilled (Male)	1.25- 1.95
Experienced—No wiring	250- 290	Semi-skilled—Assemblers	1.45- 2.17
Experienced—Wiring	315- 420	Semi-skilled—Machine Operators:	
Construction	Hour	Drill Press	2.08- 2.36
Asbestos Workers	\$3.975	Plate Punch	2.08- 2.36
Boilermakers	3.90	Punch Press	2.08- 2.36
Bricklayers	3.75	Radial Drill Press	2.08- 2.36
Carpenters	3.58	Screw Machine	2.08- 2.36
Carpet & Linoleum Workers	3.15	Turret Lathe	2.08- 2.36
Cement Finishers	3.57		
Electricians	3.90	Skilled:	
Engineers	3.00- 3.95	Engine Lathe	2.36- 2.75
Floorlayers	3.71	Machinists (General)	2.75
Glaziers	3.51	Machinists (Maintenance & Tool Room)	2.75
Ironworkers		Milling Machine	2.36- 2.75
Bridge & Structural	3.85	Tool-and-Die Maker	2.65- 3.25
Ornamental	3.85	Turret Lathe	2.36- 2.75
Reinforced Concrete	3.60	Auto Mechanic (Garage)	2.675
Laborers:		Truck Mechanic	2.80
Group 1	3.115	Welder	2.90
Group 2	2.965		
Group 3	2.865	Truck Drivers	
Lathers	3.60	Local Drivers (Any size truck)—hour	\$2.475
Lumber Handlers	2.15	Long Trips (Any size truck)—hour or mileage	.
Millman	2.875	—whichever is greater	2.57
Millwright	3.79	Short Line (Any size truck)—hour	2.49
Painters	3.33	Lumber Truck Drivers—hour	2.49- 2.60
Pile Drivers Apprentices	3.43	Routemen—week plus commission	87.00-124.50
Pile Drivers & Engineers on Derricks	3.85		
Pipe Welders	4.25	Warehousemen	Hour
Plasterers	3.75	Lift Truck Operators	\$2.475
Plumbers	4.25	Order Filler (Men)	2.185
Roofers	3.35	Receiving Clerks	2.40

Water and Power

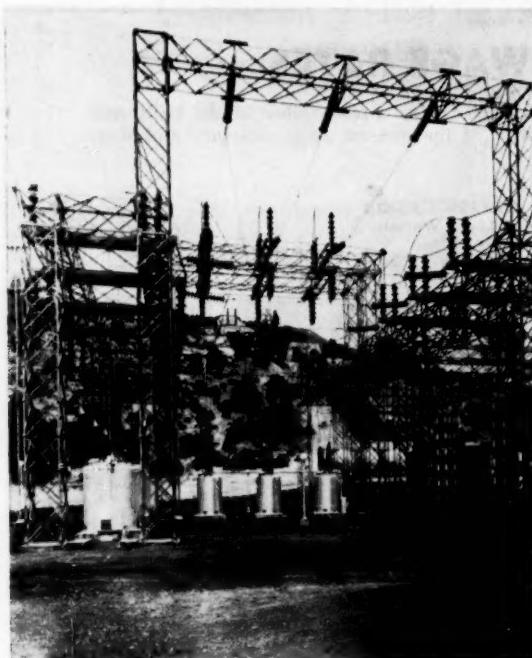
As in many other parts of the country, water and power are elements of the same system.

Construction of irrigation canals be-

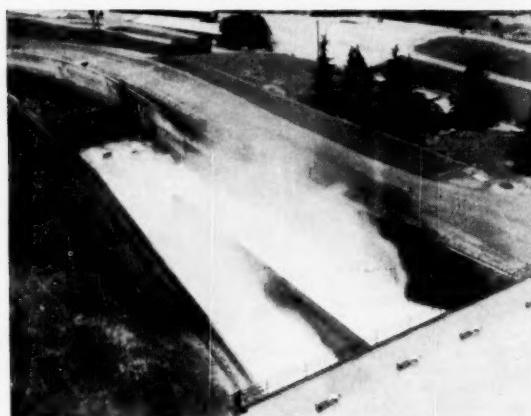
gan as early as the 1860's. Plans, counter-plans, trial canals, disputes, violence and innumerable other difficulties beset the county request for a permanent, uninterrupted water supply. However, by 1918, virtually all of the difficulties

had been overcome and the Kings River Water Association was formed as a voluntary, self-regulating policing organization. The unequal distribution of rainfall during the year in combination with water obtained from

FRESNO COUNTY



The Pacific Gas and Electric Company, through several power houses like this, supplied 1.76 billion KWH of electricity to Fresno County in 1958.



Head gate for Friant-Kern Canal which has a capacity of 4,000 cubic feet per second. World's largest man-made canal, it extends for 153 miles to the south.

melting snows have made necessary a number of water storage projects. The release of this water for consumer use through carefully located dams provides virtually unlimited water resources.

The Fresno area is served by the Pacific Gas and Electric Company. Fresno is the headquarters for the San Joaquin Division. An interesting fact in regard to power availability is that this division serving Fresno County had greater peak power loads in 1958 than more than half of the states in the nation.

The two major sources of power are the hydro-electric stations at dams

and steam generating plants.

Of particular note are two large California water-power projects, both of which serve Fresno County. They are the Kings River Project and the Central Valley Project.

Kings River Project

The Kings River is unusual in that its watershed—the area in which the water for its flow is gathered—is entirely distinct and separate from its service area—where its water is used. All the waters of the river are used and none is wasted to the sea. The collection and use of these waters for Fresno County and its other service

areas has been made possible by a unique record of public and private cooperation. Contributing materially to the project have been farmers, irrigation districts, canal companies, government agencies and for the last 30 years the Pacific Gas and Electric Company.

The Kings River's flow is backed up into five reservoirs. Flow is controlled to make maximum use of water for agricultural and industrial use and electric power from three powerhouses is obtained from the flow. The entire project cost about \$80,000,000 and generates some 261,500 kilowatts of electricity.

The Central Valley Project

During the past twenty years the Federal government has taken an active role in the development of water resources in California. The most extensive project is known as the Central Valley Project. It was developed and is operated by the Bureau of Reclamation. One of the major reservoir areas of this project is the Friant Dam on the San Joaquin River in Fresno County.

While the storage and delivery of irrigation water, and the generation of electric power are a financially contributing benefit, the principal products derived from the operation of the Central Valley Project, there are a number of other important services made possible by the integrated function of its interrelated units. Principal among these benefits are flood control, improvement of navigation, supply of municipal and industrial water, control of salinity incursion in the delta area, improvement of conditions for the propagation and preservation of fish and wildlife and recreational possibilities at water conservation sites.

Entering the San Joaquin River at the Mendota Pool, water originating in the Sacramento River Basin and transported therefrom by man-made means replaces the natural flow of the San Joaquin River, which is diverted at Friant Dam, located on the San Joaquin River, about 20 miles northeast of Fresno.

At Friant Dam almost the entire flow of the San Joaquin River is turned southward into the Friant-Kern Canal. Friant Dam is 320 feet high and has a crest length of 3,430 feet. The reservoir, Millerton Lake, has a capacity of 520,000 acre-feet. The Madera Canal, which flows northward

from its source at Friant Dam, is 37 miles long and has a capacity of 1,000 second-feet.

From Friant Dam southward for a distance of 153 miles the Friant-Kern Canal, with an initial capacity of 4,000 cubic feet per second, carries a life-giving supply of water into the major water-deficient area of the project.

In delivering water to the consumer, the Bureau of Reclamation operates through some 70 irrigation districts which receive supplies direct from the several main-line project canals. These districts are autonomous state political subdivisions. They operate and maintain their own distribution systems, which in some instances deliver water for purposes other than irrigation. Many districts owned distribution systems prior to construction of the project, while for others the Bureau constructed distribution systems under contract. These works, like the main project facilities, are, insofar as the irrigation aspect is concerned, financed under non-interest-bearing terms.

Power Usage

Power usage is always an excellent guidepost in measuring the growth of an area. Pacific Gas and Electric serving the Fresno County area makes the following breakdown of figures available covering the growth in power usage over the past 18 years.

	1940	1950	1958
Avg. No. of Customers.....	57,008	94,456	126,425
Total KWH Sales.....	379,585,236	1,150,147,344	1,760,100,071
<i>Gas</i>			
Avg. No. of Customers.....	26,574	47,824	75,309
Total MCF Sales.....	3,236,878	6,310,145	11,437,105

Energy for industrial consumption from both electricity and gas poses no problems in Fresno County, with the entire area served by the Pacific Gas and Electric Company and the Southern California Gas Company, an interlocking system of power and pipe lines assures the industrialist of uninterrupted service for any type of peak requirements. Fresno County, incidentally, is served directly by P.G. & E.'s two major gas transmission lines running from Texas to California.

Educational Facilities

Fresno State College, one of America's better-known state colleges, is located in the city of Fresno. First opened in 1911, the college was elevated to full four-year status in 1923. In 1949 the college was authorized to grant a master of arts degree.

Today students may choose their majors from 57 subject fields, with



The education of young people is of great importance to the people of Fresno County. This new auditorium to Roosevelt High School in Fresno exemplifies the progressive spirit of education over the entire county. The first junior college in California was built in Fresno County.

approximately one-third preparing for teaching credentials. The College recently completed a new twenty-five million dollar campus.

The first junior college in California was founded in Fresno in 1910. In 1917 the college began receiving state and county support and was later combined with the Fresno Normal School. Today the Fresno Junior College, recently renamed Fresno City College, has an enrollment of over 3,000.

Modern, well-staffed schools are well spaced throughout the County accord-

Recreational Facilities

Fresno County has a total area of 3,830,400 acres or 6,005 square miles. About one-third of this area is set aside in Millerton Lake State Park, the Sierra National Forest, the Sequoia National Forest, and Kings Canyon National Park. In addition, Yosemite National Park, though not actually in the county, is just north and within easy access.

The county is literally in the heart of an all-year vacation area. Among the natural attractions are thousands of Sequoia Gigantea trees measuring more than 10 feet in diameter. More than 1,000 miles of superlative fishing streams lure the fisherman to catch black bass, crappie, blue gill, rainbow trout, striped bass and Kokanee salmon. These streams are abundantly stocked by one of the largest fish hatcheries in the country, located in Friant. For the mountain climber, peaks ranging to more than 11,000 feet offer access during most of the year. Hunting enthusiasts can find within the county deer, bear, quail, pheasant, geese, ducks, dove, wild pigeons, rabbits and a variety of other game. State managed co-operative hunting areas are abundantly stocked with duck and pheasant.

From December to May skiing is available in the Sierras at Badger Pass or at China Peak.

Of particular note is the Millerton Lake State Park area, entered through the town of Friant in Fresno County. The lake was created as part of the vast Central Valley Project mentioned earlier under water and power facilities.

The lake has an area of 12,769 acres with a shoreline of 43 miles. Under an interbureau agreement with the Bu-

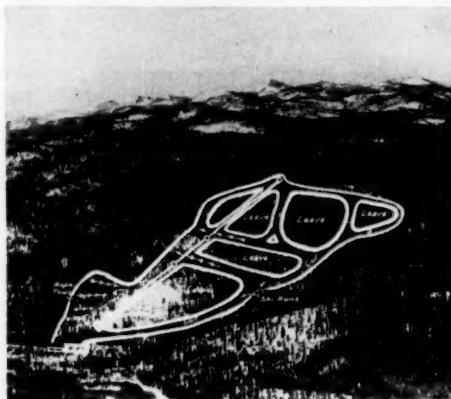
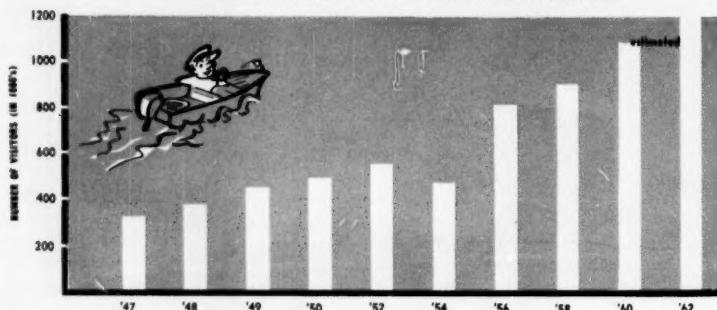
ing to population distribution. For example, Fresno County has 163 elementary schools and 37 junior high and high schools. The city of Reedley is the site of Reedley College, now occupying a new \$1.6 million campus overlooking the Kings River. At Coalinga the Coalinga Campus, started in July 1955, is already accommodating 800 day and night students in 17 of its modern buildings.

You will discover that people in Fresno County are very "education-conscious." They take pride in the efficiency of their schools and are planning improvements on a continuing basis.

Most of the industrial skills required by industry are trained in vocational education courses. Local school officials work with employers to develop special skills required.

FRESNO COUNTY

MILLERTON LAKE STATE PARK ATTENDANCE



One of the most outstanding skiing resorts in California is the newly completed China Peak run in the Huntington Lake area of Fresno County. The skiing area rises from the lake shore and is equipped with a lodge and towing chairs up the mountain side. The popularity of this area is attested by the chart which shows the State Department of Natural Resources' estimate of more than 1.2 million visitors by 1962.

ureau of Reclamation, which constructed the Friant Dam, the State Park Service administers the recreational aspects of the area. Lifeguards and rangers are on duty to assist the over 1,000,000 yearly who visit the park. Fishing in the lake is year-round as is boating. The months of February through September are preferred although the climate is mild enough to allow water sports nearly any time.

Sanger, in Fresno County, is the sponsor of the famous "Nation's Christmas Tree." This gigantic sequoia has a circumference of 107 feet at its base and rises to 267 feet in height. Rated as the "world's oldest living thing" the tree dates back over 4,000 years. In 1923 the tree was dedicated as the General Grant Tree and in 1926 the Department of the Interior officially named it the Nation's Christmas Tree. It is the central symbol of Sanger's annual Nation's Christmas Tree Festival which draws thousands of visitors every year.

Outdoor camping is one of the most popular sports in the area. The mountains of eastern Fresno County offer unlimited facilities.

In addition to Millerton Lake in the county there are Shaver Lake, Huntington Lake, and the Kingsburg recreation area on the Kings River, all popular resort areas.

Before leaving the subject of recreation, we will consider the general living conditions in the Fresno County area.

A large part of what is often referred to as "Business Climate" has to do with the evaluation of a community as a place to live. Certainly intangible factors assume great importance to families moving into a new area.

Every community has a "feeling" which is evident fairly early to the visitor. The impression one gains in Fresno County communities is compounded to two factors:

Youth and Enthusiasm

Your ID reporter talked to a number of businessmen in different parts of the county. Some were executives of large firms with regional and national distribution—some were small local firms. One quality stands out. People in Fresno County are enthusiastic about sharing the benefits that they have found with new business.

In Selma, Bob Burkheimer met us

and talked about a 40 acre industrial site which, though privately owned, is a project of the Selma District Chamber of Commerce, Burkheimer, Chamber president, told us how the citizens of this attractive little community are looking for an industry to settle. There is no doubt about the friendly reception here.

In Clovis, John McDonald, a local businessman, told us about a project currently under way. An industry was interested in the community and saw several people about obtaining a building. The precise type of structure was not available so the people got together to make an offer. They needed to raise \$200,000 to build a structure for lease. In a very short time, five businessmen in the community agreed to put up the entire amount.

In Sanger we talked to John Olson about the Sanger Industrial Foundation. A while back, an industry expressed interest in the community but needed a building. The Industrial Committee of the Chamber of Commerce undertook to obtain a building as a project. Several local business leaders got together and selected a suitable site and obtained an option. In order to complete the project they needed \$125,000. The local newspaper joined in the effort and a general town meeting was held. At the first meeting \$40,000 in shares were sold. Another meeting was held and the total rose to \$78,000. A telephone campaign was organized—another \$20,000 was raised. The company moved in and the value of the property rose.

These are not isolated examples of community spirit. A number of similar case histories could be assembled. The fact is that the attitude of the area is very pro-industry.

Sites Available

There are a number of excellent sites located throughout the county for industrial use.

The Fresno Industrial Site Foundation is a 325 acre parcel of choice industrial land located in the center of the county with easy access to the metropolitan center of Fresno. The Foundation was formed in 1950 when a group of Fresno businessmen, seeing the need for properly zoned and developed industrial land in the county, raised \$330,000 to purchase the land. The non-profit Industrial Site Foundation was founded to administer the project.

The tract is served either jointly or

singly by the Southern Pacific Railroad or the Santa Fe Railroad as needs dictate. It is equipped with industrial sewers and water mains. Main roads laid out in the site offer immediate access to U.S. Highway 99. Every lot in the area is zoned M-2 and protected by uniform set-back lines and off-street parking regulations. Specific data, prices and current availability can be obtained from the Fresno Industrial Site Foundation, P.O. Box 1469, Fresno, California.

Both the Southern Pacific and the Santa Fe Railroads own parcels of industrial property near the city, with all utilities conveniently available.

In Sanger, there are about 52 acres within the city limits zoned M-1. About 25 per cent is vacant and available in units of $\frac{1}{4}$ to 3 acres. During 1958 typical sale prices for the property ranged from \$2,000 to \$3,000 per acre. Subsoil is sandy loam, some clay and pilings are not required.

In Coalinga, of 325 acres within the city limits zoned for industry, about 90 percent is available in parcels of 2 to 165 acres. Typical sales during 1957 indicated a price of \$1,000 to \$3,000 per acre.

In Clovis, of 50 acres in the city limits zoned for light and heavy industry, about half is available in sizes ranging from 1 to 5 acres. In addition about 20 acres north of the city on rail lines is zoned for industry.

In Kerman, about 160 acres within the city limits are zoned for heavy industrial use. About 90 percent of this is available in lots of 1 to 40 acres. Sales prices recently range from \$300 to \$1500 per acre.

Outside the city limits of Kingsburg there are available 120 acres in lots of 1 to 20 acres each accessible to all utilities. Prices range from \$600 to \$2,500 per acre. Within the city limits there are parcels of 5, 7 and 8 acres available.

Reedley offers 11 parcels of vacant land zoned M-1 for light industry, ranging in size from $\frac{1}{3}$ acre to 2.5 acres on a lease basis from the Southern Pacific and the Santa Fe. Several other excellent sites are available for lease or purchase, one of which is a 80 acre tract adjoining the Great Western Airport 4 miles north of the city.

Selma has 110 acres within the city limits zoned M-1. Thirty acres in parcels of 1 to 30 acres are available. Sale prices have ranged recently from \$1000 to \$3000 per acre.

In addition to the properties out-

INDUSTRY IN THE COUNTY

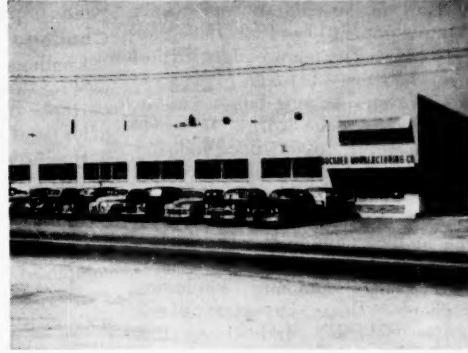
More than \$150 million annually in grape production make Fresno County the nation's grape capital. Workers in the Sun Maid plant pack raisins as the last step in the production of this important product.



A highly favorable market picture and access to raw materials attract new industries like International Paper Company which will complete this new plant in the spring of 1960.



Many firms in the county manufacture products to supply the vast agricultural needs of the area like the Buckner Manufacturing Company, which makes lawn and agricultural sprinklers.



lined above, the other communities of the county can offer industrial sites. Specific data on these and other sites can be obtained from contacts in each community listed at the end of this report.

Community Cooperation

Fresno County is an area of community living. The city of Fresno is the metropolitan trade center of the county and serves practically all of the area. However the county is unusual in that each of the smaller towns and

cities in the county retain much of their individuality.

If a single term had to be chosen to describe the spirit of Fresno County's citizens it would probably be *Local Cooperation*.

When you visit Fresno County you will want to have a base of operations. This will be the Fresno County and City Chamber of Commerce. Lloyd (Sandy) Weber, manager of the chamber, underlined for your reporter the strong local cooperation which is a part of Fresno County's way of life.

FRESNO COUNTY



Trees are not really native to the Valley floor. All the communities in the county have been planted to beautify neighborhoods and nourish the land. This residential neighborhood is typical of those found in most of the county's communities.

"People here realize that any project from a new road to a new industry located anywhere in the county will benefit the rest of the county. These are fine people to work with."

The Fresno County Chamber offices are well-staffed and can answer most of your questions about any community in the area.

However, you will want to look over the communities and know a little about each.

Fresno

Fresno, the largest city and county seat has a population of 127,000 (January, 1959). The main county airport is located just east between Fresno and Clovis. Fresno became famous as the raisin capital of the world. In recent years, however, diversified industry has contributed a strong movement toward an industrial center. There are more than 380 manufacturing plants in the community. The largest employer in the city is the Vendorlator Manufacturing Company employing 850 people. Other important plants are the Schenley Industries, Inc. (wines and spirits), Sun Maid Raisin Growers of California, California Packing Corp. (dried fruits), Producers Cotton Oil Co. (cotton seed products) and Container Corporation of America.

Fresno has 5 hospitals with a bed capacity of 1,139, a 250-bed Veterans Hospital and a Public Health Department. There are 121 churches, 7 libraries, 1 daily newspaper, the *Fresno Bee*, and 20 banks. The city also has 17 theatres, 9 parks, 8 playgrounds and 8 golf courses, a Civic Auditorium, 2 little theatre groups, and 7 swimming pools.

Clovis

Clovis, located a few miles north of Fresno, has a population of about 6,000. It has underway a 24-bed community hospital and a 10 acre park. The site for a new grammar school was recently purchased also. The largest industry in Clovis is fruit packing with 6 firms in this category. Largest employer during peak season is the Preuss Packing House and Dehydrator which employs 100 people. Other important plants are the Superior Academy Granite Company and Smitcamp's Packing House.

Coalinga

Coalinga is located in the western part of Fresno County. It is on the northern tip of the Kettleman Hills oil fields and is an important oil and agricultural community. The city has a district hospital of 40 beds, elementary school, junior high school, high school and junior college. Occupying a 40 acre campus, Coalinga College has completed \$2 million of its \$4 million, 3-year building program. It is the site of the annual Horned Toad Derby and a mineral springs health resort is nearby. Important agricultural products are certified field seed, barley, cotton, and melons. The city has a population of over 6,000.

Firebaugh

Firebaugh is an important shipping center for cantaloupe and cotton. The largest alfalfa dehydrating plant in the world is located in Firebaugh. In addition, other important employers are the V. C. Britton company, feed manufacturers and the Union Ice Company, a large ice manufacturer. Latest population figures show 2,000 for the community.



Coalinga is on the northern tip of the Kettleman Hills oil field. Nearly \$126 million worth of petroleum products were produced in Fresno County during 1957.

Huron

Huron, in the heart of the huge agricultural development on the west side of Fresno County, now known as the melon center of the world, has shown one of the most amazing growths of any of the neighboring west side cities. With only 50 residents before the war, the latest estimates give it nearly 2,000. Located advantageously on the Coalinga branch of the Southern Pacific Railroad, Huron is the site of 6 melon packing sheds, one of the largest in the nation, and 2 potato sheds, with many ideal sites available for industry along the railroad. Huron has one of the finest elementary school systems in the state, efficient fire department, excellent streets and roads leading in and out of the city, natural gas and an ample city sewer system. It is on a 10 mile fog-free route to a new multimillion dollar naval jet air base under construction and enjoys the lowest incorporated tax rate in Fresno County.

San Joaquin

Located in the western part of the county, San Joaquin is in the center of a population area composed of the communities of Tranquility and Helm as well as San Joaquin. Various types of melons are shipped from this city which forms the center for a large part of the county's western agricultural operations. The area also produces cotton, rice, barley, wheat, alfalfa and vegetables.

Fowler

Fowler is a community in the central part of the county having a population of about 1,800. It is a center for fruit and grape processing. Among the larger business firms in Fowler are Massey-Harris, distributors of farm

implements, and the Fowler Packing Company, fresh food processors.

Kerman

Kerman, called the raisin center of the valley, has also become an important oil producing area. A growing community of 2,000 it has 6 manufacturing plants. The leading category is cotton ginning. In addition, there are the Kerman Tallow Works, producing tallow and fertilizer, the Diamond Meat Company, Madera Milling Company, producers of stock food, Briscoe and Sons, farm machinery manufacturers, and the Sierra Winery. The city's Kerckhoff Park has a new swimming pool.

Kingsburg

Kingsburg has a population of about 3,500. Community facilities include a general hospital of 31 beds and a nursing home of 22 beds. Leading group classes of products manufactured in Kingsburg are farm machinery and food processing. Largest employer is the California Packing Corporation with a peak employment of about 750. Other important firms are the Kingsburg Cotton Oil Company, the Roma Winery, Towt and Sons, machinery manufacturers, and Olson Brothers, machinery manufacturers.

Reedley

Reedley, widely known as "The World's Fruit Basket," is a community on the southern rim of Fresno County with a population of about 5,500. Home of Reedley College, the city also has 2 elementary schools, a junior high school and a high school. A 30-bed hospital serves the community.

The principal manufacturing and processing plants in and near the city are the wineries of Cella Vineyards and Mt. LaSalle Vineyards, the Ivory Pine Lumber Company, Salwasser Manufacturing Company, makers of packaging and casing machinery, the Pillsbury Company, makers of livestock and poultry feeds, Sunsweet Growers, Inc., dried fruit packers, General Box Distributors, and 20 large fruit packing houses for tree fruits and grapes.

Sanger

Sanger, the Nation's Christmas Tree city, has a population of over 9,000. The city recently acquired the General Cable Corporation's new plant mentioned elsewhere in this report.

Sanger has a general hospital of 17 beds. The city has recently initiated its



Community cooperation is meaningful in Fresno County. Realizing the benefits to be gained from the development of new industry, citizens in all communities have given their wholehearted support to county-wide industrial development programs.

own urban renewal program without Federal aid. Its manager-council form of government and active planning commission are operating under a master plan. Recently a \$450,000 bond issue was voted to complete an ambitious water program which is designed to serve a city of 36,000.

The leading classes of products in Sanger's diversified manufacturing are fruit packing, food processing, and light machinery. A large textile plant, the Bayly Manufacturing Company, employs 300 people. Other important firms are the General Nailing Machine Corporation, Glacier Packing Company and Frosted Fruit Products. Copies of industry survey are available.

Selma

Selma has an estimated population of over 8,000. Located on Highway 99, south of Fresno, Selma is the site of Libby, McNeill & Libby's large fruit packing operation. Peak employment is 850.

Leading manufacturers with annual sales of in excess of \$14 million, in addition to Libby, are West Coast Growers and Packers (raisins), Central California Turkey Growers Cooperative, Selma Trailer & Manufacturing Company, Blocklite Co., Bennett & Bennett Concrete Pipe Co., and Harry McKenzie Trucking Co.

Resorts

Several of Fresno County's communities serve the recreational needs of the area. Important among these are Friant, near Friant Dam and the communities of the Shaver-Huntington Lakes area.

In the northeast portion of the county and part of the Sierra National Forest are several small villages serving these areas. Communities such as Cascada, Big Creek, Huntington Lake,

Shaver Lake and Cedar Crest welcome visitors and provide meals, sleeping facilities and stores which stock every item needed for full enjoyment of the Lakes area.

About a mile south of the Friant Dam, which backs up Millerton Lake, is the community of Friant. Sportsmen and vacationers regard Friant and the Trading Post as the headquarters for this large and popular recreation area.

Contacts

You will want to know who to see to help you in your further investigations of communities in Fresno County. Here are your aid sources:

Clovis—Clovis Chamber of Commerce, Emil Prudek, President, Carl McDonald, Secretary, 4114 Pollasky.

Coalinga—Coalinga Chamber of Commerce, Floyd Howe, Manager, City Hall, P.O. Box 56.

Firebaugh—Firebaugh Chamber of Commerce, Reno Cardella, President, 10th and O Sts., P. O. Box 141.

Fowler—Fowler Chamber of Commerce, John Gigliotti, President, 220 E. Merced Street.

Fresno—Fresno County and City Chamber of Commerce, L. S. Weber, Manager, P.O. Box 1469.

Friant—Friant Chamber of Commerce, Jack Myrick, President, Friant Trading Post.

Huron—Huron Chamber of Commerce, Mrs. Mary Brooker, Secretary, P.O. Box 486.

Kerman—Kerman Chamber of Commerce, R. A. Cooke, Manager, City Hall, P.O. Box 661.

Kingsburg—Kingsburg Chamber of Commerce, Mrs. Dorothy J. Harrison, Manager, P. O. Box 515.

Reedley—Reedley Chamber of Commerce, Art Johnson, President, Mrs. Fern Davis, Secretary, 1715 11th St.

Sanger—Sanger Chamber of Commerce, Norman Holt, Manager, Library Building.

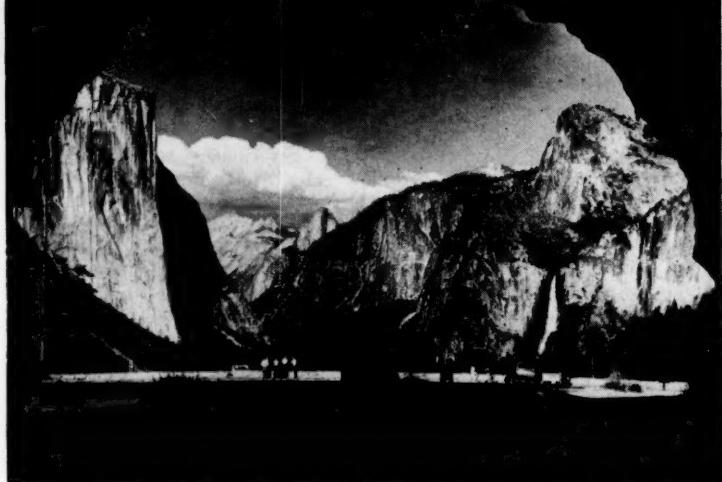
San Joaquin—San Joaquin Chamber of Commerce, Mrs. Genelle M. Hanneman, Secretary, P.O. Box 615.

Selma—Selma Chamber of Commerce, Bob Burkheimer, President, P. O. Box 194.

Shaver-Huntington Lakes Area—Mrs. Betty Watkins, P.O. Box 1497.

LIVING IN FRESNO COUNTY

From the warm sunny floor of the San Joaquin Valley to the snow-capped peaks of the Sierras, Fresno County offers unlimited opportunities to pleasure-seeker from all over the nation. Whether one likes the thrill of skiing down a mountainside on powdery snow or the invigorating fun of water skiing on large, beautiful lakes, Fresno County offers superior facilities. The photographs on this page illustrate the range of pleasurable living enjoyed by Fresno Countians.



Looking out through the portals of a tunnel cut through a mountain the peaks of famous Yosemite Park lure sportsman and tourist alike. This popular park is close by Fresno County and is easily accessible from any part of the area.



Since the climate of Fresno County is very temperate all year round, people live out of doors. This backyard scene is typical of outdoor living possible nearly twelve months out of the year.

This special feature on Fresno County was prepared under the auspices of the Chambers of Commerce listed on page 31. Additional copies can be obtained from any chamber listed.



Operations of the sprawling Mead organization are directed from offices in the Talbott Tower in Dayton, Ohio.

cover story

The carefully planned expansion and improvement program of Mead Corporation has resulted in a sales gain from an annual rate of \$76 million to \$300 million in the past 10 years. Here's how it was done . . .

EXPLOSIVE GROWTH AT MEAD!

ALMOST anywhere you go among the mills and plants of The Mead Corporation these days, you're likely to run into the noise and bustle of construction and improvement projects. All are important to the future course of the 113-year-old company whose growth has been almost explosive in the past few years. But the construction noises that sound most like music to those responsible for charting and guiding the course of Mead's growth come from three locations in Ohio.

The hammering and sawing that ring out from the construction of the New Products Center in Cincinnati, and the high-speed whine of the experimental paper machine just installed in a special research building in Chillicothe, Ohio, are indicators of the pattern of Mead's growth. And the clatter of bulldozers, shovels, riveting, and rising steel will begin any day now on two extensions of Mead Research Laboratories in Chillicothe and an enlargement of their research pilot plant. Mead directors authorized the research additions at the last meeting of the board.

Sales of The Mead Corporation have swelled during the last ten years from \$76 million to a rate of \$300 million so

far in 1959. This growth is based on moving into new product lines, finding new and unusual uses for established products, and exploiting vigorous sales and advertising efforts.

Expanding markets require more and more manufacturing facilities. During the last three years, Mead has put more than \$50 million into modernizing and developing its paper and paperboard mills and container and packaging plants. Another \$20 million, more or less, is going into capital expenditures in 1959.

Much of Mead's capital investment goes toward improving the efficiency of present production machinery, stepping up the quality of products, and enlarging warehouse space. Some of it leads to added productive facilities. Just a few months ago, for example, Mead bought a million-dollar plant from the Ford Motor Co. in Louisville, so its box plant there will have room to install a new corrugator and expand its service to Louisville industry.

The heart of a paper-&packaging company is its paper and paperboard producing equipment. During the past year and a half, Mead has brought two new paper machines into production—

one in the field of fine papers (for business and printing use), the other in technical and industrial specialties. It now has 41 of these paper, pulp, and board making machines, each of which must be backed up by an impressive investment in pulping and power-generating equipment. In the past few months, Mead has set up (in partnership with Inland Container Corporation) a new affiliate to build a 500-ton containerboard machine, with its supporting pulp and power facilities, in conjunction with their linerboard mill at Rome, Georgia.

Beside its full-scale machines, Mead operates two experimental paper machines. One is the high-speed research machine mentioned earlier. Actually this machine includes only the first half of a paper machine, the half paper makers term the "wet end," since the pulp mixture from which a sheet of paper is formed is 99 per cent water. With this machine, Mead scientists are exploring the basic problems of fine paper formation at speeds well beyond those used in fine paper mills today. "We believe that such half-mile-a-minute (and faster) speeds will be regular practice in the next 10 years," Mead's

MEAD CORPORATION



Mead Corporation paper, board, pulp and container operations are well distributed over the eastern half of the nation. The company also has warehouses and packaging sales offices at points in the middle and far west parts of the country.

chairman H. E. Whitaker says.

Another experimental machine (only one-thirtieth the size of the largest Mead machine) permits the scientific force working on the technical grades of the mill at South Lee, Mass., to make semi-production runs on a miniature basis of types of paper containing very expensive and unusual paper-making materials, such as synthetic and ceramic fibers. A third experimental machine, similar to the South Lee machine, is to

be part of the equipment of the Research Laboratories extension mentioned before.

The way in which Mead has grown, and the multiplicity and variety of its paper and converted products today would be most surprising to one who only knew the company as it was 35 years ago. For many years, Mead was known as a one-product paper company; it made papers for publications—magazines—and not much else. Even as

it developed grades for book publishers, for printers, and for converters, Mead continued to be thought of chiefly as a manufacturer of publication papers. The significant research and production effort that went into the development of the present wide range of bond and business papers, begun about 1935, began to attract attention to the changing character of Mead's products.

Mead also pioneered the use of spent chips from the chestnut tanning extract industry to make a high-quality paper-board for corrugating use, in the late 20s. This is the board which gives the familiar corrugated container its impressive protective cushioning ability. As a result, Mead became for a time the major manufacturer of chestnut tanning extract.

Competition, however, was increasingly tough from other natural tanning agents, and from newer synthetic agents; since the chestnut forests on which the industry was based had been largely destroyed by blight, Mead put its research men to work on the problem of working out new sources of pulp for the corrugating mills, and eased out of the extract business. A way was found to make the transition to hardwood pulping, in place of chestnut, for what the trade calls "nine-point"—corrugating board nine-thousandths of an inch thick. In the process they created even more rigid materials for container manufacturers.

Similar research into methods of making pulp from wood fibers that had once been considered difficult or impossible to use for fine papers, has led to more complete utilization of forest stands close to Mead plants. Results: ability to increase production of mills without forest drain; decreased transportation costs for wood; and a booming cash market for farmers near Mead mills.

Research at South Lee was, in the meantime, developing an unusual new product line, the industrial and special-use papers mentioned above. These papers, many of them using fibers of metal or ceramic or glass, or such man-made fibers as rayon, are finding a wide range of uses new to paper—special filtering applications, lining the combustion chambers of furnaces, entering into paper-&-plastic combinations with remarkable insulating and decorative properties.

These research programs have produced new "raw materials" for conversion. Other Mead research has had its

Howard Edwards Whitaker, chairman of the board of The Mead Corporation, has a paper-making career spanning 34 years, all of it with the company whose chief executive officer he is today. He joined Mead in 1925, not long after earning his M. S. degree in chemical engineering from Massachusetts Institute of Technology, and held a number of technical, production, and staff positions in his progression to president in 1952 and chairman of the board in 1957. He was born in Woburn, Mass., son of a scientific management expert. During World War II, Mr. Whitaker spent two and a half years in government service, with the War Production Board, the Combined Production & Resources Board, and the U. S. Economic Mission in London.



eye on new converted products. In packaging this has led to the multiple-pack, new packaging machinery, imaginative use of design to create secondary use of containers, cost-saving and product-pampering container constructions, and so on.

The multiple-unit package has taken several interesting directions and is playing an increasing role in the life of American shoppers. The convenience of the Bottle-Master* carry-home carton spurs the purchase of soft drinks. Mead Cluster-Paks* neatly wrap from two to six (or even more) cans or bottle together in a single unit which has much greater product identification on a store shelf. Now Mead Cluster-Wraps have just been introduced to extend the same advantages to soft rectangular packages, such as ice cream.

New Techniques

Further application of more highly developed paper making and graphic arts techniques are bound to extend the usefulness of packaging and containers. Mead is fortunate in being able to call on its 113-year-long experience in printing, and its pioneering efforts in coating paper and paperboard to keep its packaging and container plants in the forefront of competition in the years ahead.

Today Mead is building a much larger organization to study new products for the future than ever before—to plan and develop the products the company will be making five and ten years from now, and beyond. The Cincinnati New Products Center will have

*Bottle-Master and Cluster-Pak are registered Mead trademarks.

facilities for working out wholly new uses of paperboard and paper packaging. While the installation is still incomplete, a staff for the Center has begun to be formed. They have already created several interesting new concepts in packaging, and are working toward new techniques of packaging and packaging machinery.

A realignment of the Mead Research Laboratories staff has been effected to concentrate effort on new product research in what may be considered "raw materials" for conversion either by the company itself or by its customers. For paper itself is a changing commodity. Today's grades are often radically different from yesterday's. Coated developments, brighter colors (even whiter-than-white paper), smoother surfaces, special specifications such as flash-drying of inks, make current papers more versatile, adaptable, than ever before.

"But we're a long way from exhausting the possibilities of improvement and change and adaptation in paper and paper products," according to Whitaker. "Combinations of paper with other materials and paper made from unorthodox materials have scarcely been touched. The longer I'm in the paper business, the more I feel we have much more to learn about it. We think we have pretty good technical skill today. In a few years we'll look back and say we didn't know so much after all. I have a feeling that the 1960s will be a revelation to all of us."

To reap the results of the growth that technology, research, and improved manufacturing facilities can bring, Mead has in recent years begun to advertise more widely, both in a variety of specific trade journal campaigns, and

in dramatic national advertising; has spread out its sales forces more widely; embarked on vigorous sales training programs; worked out more responsive scheduling techniques to insure the swiftest possible customer servicing and deliveries; and erected and expanded warehouse facilities.

"The aim of our growth and expansion has not been in the interest of size or volume," Mr. Whitaker says. "Rather, our main objective is to make The Mead Corporation the best operation in the industry. We have found, like so many others, that this means planning ahead, years ahead, as to what our best situation will be. It means a more carefully coordinated program of our markets and our production facilities, a very broad coordination of all the functions of our organization—marketing, or sales, to determine what the country is going to want; finance, to provide the funds to equip ourselves to meet these markets; the engineering and research to design the plant we need, and make it practical; and the highest level of efficiency and precision we know how to accomplish.

Seeing Ahead

"Good management, in my book, is the very simple idea of seeing ahead and then building the organization and facilities to achieve your objectives."

Not long ago, Mr. Whitaker was talking to a group of 25-year employees in the Mead mill at Leominster, Mass. He told them:

"The growth of The Mead Corporation is designed on a longer range plan than ever before. It provides greater stability and security (both in investment and employment), since its business is more diversified, spread out in more different fields and markets. It is set up to meet the future demand of the public, rather than simply current or past practice. It is based on the best technical brains we can find, to be managed by the most able executives we can train, and to be operated by trained and skilled people."

Steady growth in annual sales tells the story of Mead's success so far: up four times in the past decade. At the rate the company has been producing so far in 1959, it will hit the \$300 million mark for the first time.

Mead's position in the paper industry also reflects this progress. From twelfth among American paper companies a few years ago, the company now ranks seventh according to a recent survey of industrial corporations.



June 16



July 17



July 23

The Fabulous Forty-four

IN JUST 44 FABULOUS DAYS KINGSPORT, TENNESSEE ANNOUNCED:

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3. THE NEW MULTI-MILLION DOLLAR DEPARTMENT STORE.
4. TWO NEW HOTELS.



July 5

There's A Reason!

FOR FURTHER INFORMATION CONTACT:

A. B. COLEMAN
EXECUTIVE VICE PRESIDENT
KINGSPORT CHAMBER OF COMMERCE, INC.
226 COMMERCE STREET
KINGSPORT, TENNESSEE
PHONE: Circle 5-3111



July 29

FACTS BEHIND THE WEATHER INDEX

Why was the much-publicized Discomfort Index—or Temperature-Humidity Index—devised? What does it mean and what is its future? Here are the facts written by the weather expert in charge of the program . . .

By Earl C. Thom

*Chief, Special Projects Section, Office of Climatology
U. S. Weather Bureau*

FOR some three years prior to June 15, 1959, the term Discomfort Index had been used in various publications as the designator of the combined numerical index of the summertime effect of air temperature and air moisture content. This season during spring and early summer all Weather Bureau offices were given the details so that they could compute the Discomfort Index. This was made optional with each station if they had time to do it and if there was a public demand for this index.

A considerable number of the Weather Bureau offices introduced the Index locally at the beginning of the season. Where the innovation was introduced it caught the public fancy at once and it received an amazing amount of publicity. So many objections were made to the name "Discomfort Index" (DI) however, that on June 15th the Weather Bureau, through a Department of Commerce news release, suggested a change to "Temperature-Humidity Index" (THI) as a designator for the Index for the remainder of the season. At the same time the public was asked for suggestions for the best name for this Index. As a result people by the dozens have come forward with name-ideas. At the end of the season the Bureau will decide whether the index is to be continued and if so what its official name will be.

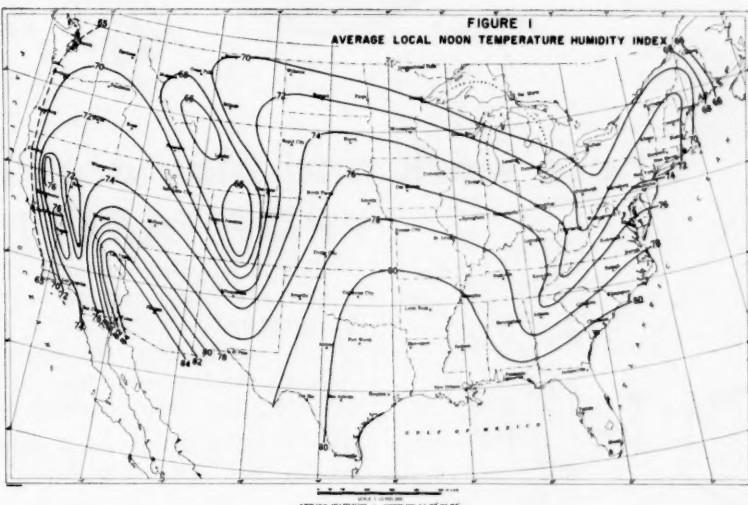
Discomfort Index Origin

An engineer from one of the larger electric utilities gave a report at a scientific meeting some years ago. This report was the start of the index idea. He

said that in his area the excess of the mean of the daily average dry bulb and wet bulb temperatures over a selected base value was proving to be a useful cooling degree day system. This average of dry and wet bulb temperatures was a new idea in meteorology. Logic for the use of such an average as a base for a cooling degree day system was obvious when it was noted that the average of the two simultaneous temperatures quite closely approximated the numerical value of the "Effective Temperature" which these readings gave.

"Effective Temperature" values have

been used by engineers since the early 1920's when the American Society of Heating and Ventilating Engineers started a series of physiological laboratory experiments at the United States Bureau of Mines, Pittsburgh, Pennsylvania. From this study of the reactions of human beings under a wide variety of controlled temperature and humidity conditions the Society established "effective temperature" (equal comfort) lines each of which passes through the pairs of temperature and humidity combinations which gave to the "average" person the same degree of comfort as nearly as could be determined.



The old saying that "It's not the temperature but the humidity that counts" is illustrated here. The figures on the map show combined average July-August temperature-humidity averages.



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ST. PETERSBURG CHAMBER OF COMMERCE

Jack Bryan, Industrial Director

Dept. ID

St. Petersburg, Florida

LAWTON OKLAHOMA



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Building sites, ideally located near railroads, highways, airport, all within one mile of the city. It's a city with a big future and a lot to offer.

Lawton Will . . .

Welcome you when you come to look over the city, and it will welcome your company to a growing list of firms who are making Lawton part of their future.

•

Lawton is the answer to your future in the growing southwest!

LAWTON

CHAMBER OF

COMMERCE

BOX 777

Each of these lines was designated by the dry bulb temperature at 100% relative humidity (saturated air). For example the "effective temperature" line of 90° connects the point 90° temperature at 100% relative humidity with many other equal comfort combinations, including 95° at 77% R. H.; 100° at 58%; 105° at 43%; 110° at 31% and 115° at 22%.

Since the process of referring each separate pair of observed readings to a chart to secure the corresponding effective temperature reading was cumbersome it seemed that the simple arithmetic average of the wet-bulb and dry-bulb temperatures would be much easier to work with. This simple average was given the name "Discomfort Index."

It was noted that the simple average and the corresponding effective temperature value did not agree as well as desired at the extremes of the scale so that a simple adjustment which would bring the variations into closer agreement was desirable. The amount of moisture in a sample of air at a given dry bulb temperature is known if we

have the wet bulb reading but it is also indicated if we have either the dew point temperature or the relative humidity.

The following equations were developed by Mr. J. F. Bosen, Office of Climatology, Weather Bureau: (The Index designator was changed from "Discomfort Index" (DI) to "Temperature-Humidity Index" (THI) on June 15, 1959.)

- (1) THI = 0.4 (td + tw) + 15
- (2) THI = .55 td + .2 tdp + 17.5
- (3) THI = td - (0.55 - 0.55 RH). (td - 58)

Where THI is Temperature-Humidity Index; td is dry bulb temperature in °F; tw is wet bulb temperature in °F; tdp is dew point temperature in °F; RH is relative humidity percentage expressed in decimals (e.g., 0.65 is used for 65%).

A survey of the existing summaries of Weather Bureau observations indicated that these data have not usually been summarized so that average Temperature-Humidity Index values for the same local time could be secured. Fortunately the local noon dry bulb and wet bulb temperature readings

WEATHER INDEX

made by the Weather Bureau at over one hundred and fifty stations have been summarized for a four year period.³ Figure 1 was prepared from these data and is of particular interest because the combined average July and August temperature-humidity conditions at about the same sun-time are presented. While topography has been considered in drawing the Index isolines on this generalized map it is obvious that the variations due to local rapid elevation changes cannot be shown in detail.

There are other interesting features that cannot be shown on such a map. The maximum heat as well as the maximum index value of the day usually occurs two or more hours after local noon. Also the nights are much more comfortable at this season in some of the areas of maximum afternoon discomfort than are the nights in other areas where the afternoons have somewhat lower Index values. Then, too, in some areas good breezes blow from bodies of water and thus decrease the afternoon discomfort in buildings and

locations where it is possible to take advantage of the outside wind movement.

Table 1 shows the diurnal variability of the average July Temperature-Humidity Index for a selection of stations.

References

1. a. "Climate and Air Conditioning," Weather Bureau *Weekly Weather and Crop Bulletin*, July 23, 1956.
- b. "Measuring the Need for Air Conditioning"; "A New Concept for Cooling Degree-Days"; "Cooling Degree Days,"

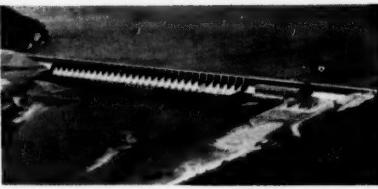
ABOUT THE AUTHOR

Earl C. Thom, the "discomfort index" specialist, attended the University of Kansas and in 1923 received his AB in mathematics from York College. He took additional courses in the Graduate School, Department of Agriculture, Washington, D. C. After graduation he taught in high schools in Kansas, Missouri, and Nebraska until September 1931 when he entered the service of the United States Weather Bureau at the then newly opened airport station at Denver, Colorado. During 1934 and 1935 he was a civilian employee of the Adjutant General's Office, War Department, Washington, D. C. He has been in the Central Office, United States Weather Bureau since 1935 and has served in the Marine Division, Aerological Division, Climate and Crop Weather Division and is at present Chief of the Special Projects Section, Investigation Branch, Office of Climatology.

He is the author of a number of Weather Bureau publications, has contributed articles to department publications, has published two articles and one reference section in "Air Conditioning, Heating and Ventilating" magazine. He has told the "discomfort index" story on three radio programs and has made a recording on the subject for the "Voice of America."

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With three converging rivers and 20,000-acre Lake Fort Gibson to draw on, Muskogee has water in super-abundance; more than 75 million gallons a day available for industrial use. And that's not all—Muskogee has every other desirable feature you're looking for, too. Man-power, natural gas, electricity, transportation, ideal living conditions, recreational facilities; you'll find them all in Oklahoma's "Miracle City."



Check these advantages for your industry:

ELECTRICITY—New \$24,000,000 Oklahoma Gas & Electric Company generating plant completed in June, 1956, with a 17,000 kw capacity designed to meet the needs of the largest industrial plant.

NATURAL GAS—A supply of 70,000,000 cu. ft. a day for industry's use from Oklahoma Natural Gas Company.

MANPOWER—One of the richest pools of both skilled and unskilled labor anywhere in the Southwest.

TRANSPORTATION—Served by five railroads: Missouri-Kansas-Texas; Kansas, Oklahoma and Gulf; Midland Valley; Frisco; Missouri-Pacific. A total of 17 commercial truck lines also serve the area.

RECREATION—Right next door to the beautiful Oklahoma lake region, America's newest vacationland. A 30-minute drive puts you or your employees on the shores of Lake Fort Gibson or the 12,500-acre Tenkiller Lake.



The Callery Chemical Company selected a 1,300-acre site just east of Muskogee on the Arkansas River for its \$38,000,000 high energy or "exotic" fuel plant because of abundant water, power, natural gas, and waste disposal facility.

FREE—CONFIDENTIAL SURVEY

The 140-member Muskogee Industrial Foundation and the Chamber of Commerce will prepare a confidential survey for you. Write, wire or call the Muskogee Chamber of Commerce, P. O. Box 1534, Muskogee, Oklahoma.

MUSKOGE

third largest city in Oklahoma

NOW AVAILABLE: Choice locations for your industry, in and near Muskogee. Nearly 1,000 acres of industrial sites, ideally situated for chemical plants, aircraft plants, textile mills, manufacturing plants, etc. For information, contact the Muskogee Chamber of Commerce.

by Earl C. Thom, *Air Conditioning Heating and Ventilating* issues August 1956, June 1957 and July 1958, respectively.

- c. "Bioclimatic Work in the Weather Bureau," H. E. Landsberg, an unpublished mimeograph release of the Weather Bureau.
- d. "Handbook of Air Conditioning Heating and Ventilating," Pages 1-153 and 1-154, Clifford Strock, Editor, William B. Foxhall, Associate Editor, *The Industrial Press*, 1959.
2. See pages 124 et seq, 1956 edition *Heating, Ventilating and Air Conditioning Guide*, American Society of Heating and Air Conditioning Engineers. Also "Determination of the Comfort Zone" by F. C. Houghton and C. P. Yaglov, ASHVE Trans, 1923.
3. "Summer Weather Data," The Marley Company, Fairfax and Marley Roads, Kansas City, Mo., second printing, 1944.



O K L A H O M A

A STATE ON THE UPBEAT



By Jouett Davenport, Jr.

Oklahoma offers you such important factors as a tax structure that compares favorably with the nation's best, vast energy reserves, a location in the center of the booming southwestern market, which also is strategic nationally from the standpoint of dispersal, and an abundance of land well suited for plant sites. Further, the state's new thinking is reflected in the fact that 34-year-old Governor Edmondson during his first year as chief executive has had full cooperation in getting passed every new and progressive legislative act he favored. Notable among these has been the repeal, overwhelmingly, of Oklahoma's prohibition law, with the state going wet in every county as of September 1 this year.

OKLAHOMA CITY. If you have never visited Oklahoma, it could be that your impression of the state consists chiefly of a jumble of things about Indians, outlaws, dust storms, heat and a Broadway musical.

However, if that's all you know about Oklahoma, you may be missing a bet on an area that actually is in the midst of a rapidly accelerating industrial boom.

From whence comes this impetus? Note, for example, that Oklahoma is a young state, having celebrated its 50th anniversary in 1957. And, today it is imbued with even more youthful vigor



During a recent visit to the New York offices of Sperry and Hutchinson Company, Oklahoma Governor J. Howard Edmondson points out on the map the location of Allied Graphic Arts' new plant in Sand Springs. Looking on (left to right) are J. E. Daley, assistant to the president of Public Service Company, Tulsa; Art Lindberg, manager of the Tulsa Chamber's Industrial Division; William S. Beinecke, vice president and general counsel of Sperry and Hutchinson; Salie Wyker, president, Allied Graphic Arts, and Max Genet, Jr., director of the Oklahoma Department of Commerce and Industry.

in the state administration headed by 34-year-old Governor J. Howard Edmondson.

Geographically, it is located literally in the middle of things, with its 69,919 square miles of land area bounded on the east by Arkansas and Missouri, on the north by Kansas and Colorado, and on the south and west by Texas and New Mexico. Its topography varies from verdant valleys and rolling mountainous land to Great Plains areas where the wheat grows.

Oklahoma has an abundance of electric power, plenty of natural gas and oil, tremendous coal reserves, and a

substantial labor pool. The Arkansas River Navigation Project now under way will greatly augment the water supply in addition to connecting western Arkansas and eastern Oklahoma with the 29,000-mile Inland Waterways System.

Well, now, what about the Indians? They're here, all right, but they don't live on reservations as no such thing exists in Oklahoma. These aborigines are pretty much like any other United States citizens in the way they work and play, although on occasion they can come up with the proper costumes for a real Indian powwow.

Cowboys? They're here, too, but they're mechanized these days, and livestock in Oklahoma produces about as much income as oil.

As for famous outlaws, those who once created a lot of publicity for the state now belong in the pages of history. Right now Oklahoma's excellent school system is producing stable citizens with one of the nation's highest literacy rates.

The dust storms of the 1930's and the migration of "Okies" to the West Coast created no end of stories. The fact is, however, that the migrations were caused not so much by dust as by a

OKLAHOMA ECONOMIC DATA

Business Volume

Industry	1958			1954			1947			1939		
	Active Estab. (000)	Persons Engaged (000)	Output Value \$ Mil.									
Miscellaneous Rural ...	2	3	\$ 9	\$ 10	\$ 4	\$ 1						
Farming	116.6	117	698	597	735	230						
Mining	1.8	50	871	737	391	197						
Raw Materials	118.6	170	\$ 1,578	\$ 1,344	\$ 1,130	\$ 428						
Construction	6.3	51	479	356	177	78						
Manufacturing	2.2	82	2,106	1,744	1,085	312						
Processing	8.5	133	\$ 2,585	\$ 2,100	\$ 1,262	\$ 390						
Utilities	3.0	48	680	585	373	162						
Finance	3.9	26	714	499	271	94						
Supplementary	6.9	74	\$ 1,394	\$ 1,084	\$ 644	\$ 256						
Wholesale Trade	3.9	37	2,632	2,287	1,544	462						
Retail Trade	28.0	117	2,505	2,117	1,479	513						
Service Trade	17.3	92	691	547	395	163						
Distributive	49.2	246	\$ 5,828	\$ 4,951	\$ 3,418	\$ 1,138						
Oklahoma Enterprise	183.2	623	\$ 11,385	\$ 9,479	\$ 6,454	\$ 2,212						

Manufacturing

Industry	1958			1954			1947			1939		
	Active Estab. (000)	Persons Engaged (000)	Output Value \$ Mil.									
Food .....	.6	14	\$ 434	\$ 380	\$ 324	\$ 108						
Tobacco	*	1	32	52	4	3						
Textiles	*	3	41	24	5	2						
Apparel .....	.1	1	15	17	8	2						
Pulp-Paper .....	.4	6	67	55	37	15						
Printing-Publishing .....	.1	2	50	39	39	11						
Chemicals .....	.1	9	585	501	443	108						
Petroleum-Coal	*	1	68	59	10	1						
Rubber	*	2	1	1	1	1						
Leather	1.3	37	\$ 1,294	\$ 1,128	\$ 871	\$ 250						
Nondurables												
Lumber .....	.2	3	20	19	17	7						
Furniture .....	.1	2	22	18	6	4						
Stone, etc. ....	.1	6	114	77	37	13						
Primary Metals	*	3	55	64	58	17						
Fabricated Metals .....	.1	6	110	102	15	5						
Machinery .....	.3	12	232	157	62	13						
Electrical Machinery	*	1	27	16	2	1						
Transport Equipment	*	10	214	147	14	1						
Instruments	*	1	7	6	2	1						
Miscellaneous Mfg. ....	.1	1	11	10	1	1						
Durables .....	.9	45	\$ 812	\$ 616	\$ 214	\$ 62						
Okl. Manufacturing	2.2	82	\$ 2,106	\$ 1,744	\$ 1,085	\$ 312						

* Too small to tabulate.

Urban Business Volume—\$ Million

Urban Area (City & County)	1958			1954			1947			1939		
	All Business	Other Than Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing	Manufacturing
Oklahoma City	\$ 2,986	\$ 2,562	\$ 424	\$ 39	\$ 229	\$ 69						
Tulsa	2,768	2,109	659	502	275	70						
Ponca City	392	172	220	177	105	28						
Enid	345	265	80	68	68	20						
Muscowee	225	193	62	49	24	6						
Lawton	204	185	19	14	7	8						
Bartlesville	171	145	29	30	14	5						
Shawnee	165	125	40	35	10	11						
Stillwater	152	114	38	38	27	11						
Norman	91	85	6	4	1	1						
Total Urban	\$ 7,532	\$ 5,955	\$ 1,577	\$ 1,227	\$ 760	\$ 219						
Non-Urban	\$ 3,853	\$ 3,324	\$ 529	\$ 517	\$ 325	\$ 93						
Oklahoma	\$ 11,385	\$ 9,279	\$ 2,106	\$ 1,744	\$ 1,085	\$ 312						

* Too small to tabulate.

Urban Income & Expenditure

Urban Area (City & County)	1950			1958			1950			1958		
	Population (000)	Population (000)	Consumer Income \$ Mil.	Per Capita Income \$ Mil.	Consumer Purchases \$ Mil.	Per Capita Purchases \$ Mil.	Population (000)	Population (000)	Consumer Income \$ Mil.	Per Capita Income \$ Mil.	Consumer Purchases \$ Mil.	Per Capita Purchases \$ Mil.
Oklahoma City	322	425	\$ 939	\$ 2,209	\$ 781	\$ 1,838						
Tulsa	249	341	935	2,742	621	1,821						
Ponca City	49	56	121	2,160	81	1,446						
Enid	53	67	111	1,656	108	1,611						
Muskogee	65	65	90	1,384	77	1,185						
Lawton	55	60	89	1,483	102	1,700						
Bartlesville	33	40	72	1,800	55	1,375						
Shawnee	44	50	64	1,280	62	1,240						
Stillwater	46	48	57	1,187	55	1,145						
Norman	41	47	45	957	48	1,021						
Total Urban	957	1,199	\$ 2,523	\$ 2,104	\$ 1,990	\$ 1,659						
Non-Urban	1,267	1,086	\$ 1,214	\$ 1,117	\$ 1,326	\$ 1,220						
Oklahoma	2,224	2,285	\$ 3,737	\$ 1,635	\$ 3,316	\$ 1,451						

© 1959, Blue Book of Southern Progress

OKLAHOMA

combination of mechanization of agriculture and federal crop control. Since then, growing industrial opportunities have stopped the necessity for migration.

A fact, too, is that the area which was referred to as the "dust bowl" helped produce in 1958 a wheat crop valued at \$194 million, along with much of the nation's beef.

Nobody attempts to deny, either, that it gets hot here—as it does in many places—during the summer, but practically every place you go is air conditioned, and most people ride from place to place in air-conditioned automobiles.

Of course the musical "Oklahoma!" which was also made into a movie has been viewed and enjoyed by millions of people, but it gives the picture as it was in the early days of the Sooner State.

So, let's give a closer look at Oklahoma today and consider in further detail some of the factors which make the state very worthy of your consideration in selecting a plant site.

Situated in the very heart of the fast-growing Southwestern market area, Oklahoma has within a radius of 500 miles a population estimated at more than 42 million. The income of these citizens totals in excess of \$67 billion, supporting an ever-increasing number of retail, manufacturing and service establishments.

Figures from the 1959 edition of The Blue Book of Southern Progress show that in the State of Oklahoma alone the 183,200 active establishments, including farming operations, had a total output value in 1958 of \$11.385 billion. The latter total compared with \$9.479 billion in 1954 and \$6.454 billion in 1947.

A further breakdown of the figures shows that the 2,200 manufacturing establishments had an output value of \$2.106 billion, up from \$1.741 billion in 1954 and \$1.085 billion in 1947.

Total consumer income of Oklahomans in 1958 was estimated at \$3.737 billion, while the per capita income figure listed in the Blue Book was \$1,635.

Consumer purchases for the year in the state came to \$3.316 billion, and per capita purchases amounted to \$1,451 for the year.

In 1957 the consumer income was listed at \$3.7 billion, while per capita income was \$1,625. Consumer purchases amounted to \$3.284 billion, and per capita purchases, \$1,442.

Abundant Power

The Public Service Company of Oklahoma, with general offices in Tulsa, and Oklahoma Gas and Electric Company, which has headquarters in Oklahoma City, are the principal electric utilities serving the state. Each of these has continuing and extensive expansion programs designed to meet the needs for industrial expansion in the future.

Public Service has its lines extended to 239 communities in 49 of Oklahoma's 77 counties. It has just completed a four-year, \$40 million expansion program at its Tulsa Power Station, raising the total electric generating capacity there to 483,000 kilowatts.

Currently the company is building an entirely new steam electric generating station about 30 miles north and

in facilities has reached \$206,500,000.

Reflecting the general gain in economic activity, in 1958 the company sold 2,434,000 kilowatt hours of electricity to all classes of customers, while 1959 sales are estimated at 2,576,000 kwh.

A contract, now before the Federal Power Commission, between Public Service Company of Oklahoma and the Grand River Dam Authority, a state agency, calls for the interchange, purchase, sale and delivery of electric power and energy in connection with the hydro-electric power and flood control development at proposed Markham Ferry Dam on the Grand River.

The contract was authorized by the Oklahoma legislature in 1957 and declared to be a valid agreement by the

ments.

The company also built a new General Service Center in Oklahoma City and during the year completed a six-story addition to the general office building as well as remodeling of four of the original floors.

For 1959 the company budgeted \$19,500,000 for construction expenditures. Of that total, approximately \$6,500,000 was required to complete the installation of the fourth unit at Mustang Station, 10 miles west of Oklahoma City. This unit went into service in June, with a net capability of 240,000 kilowatts.

Altogether, the net capability for the company's entire system is now 1,138,000 kilowatts, which is about four and a half times what it was at the end of 1949.

Both these companies are interconnected with neighboring utilities and maintain emergency standby power agreements with them. Both companies also are taking part in atomic research activities. They are members of Southwest Atomic Energy Associates. This is an association of 15 electric utilities in the Southwest region, formed in 1957 to conduct research for the development of a new-type of nuclear power reactor for the generation of electricity. The experimental work is being carried on under a contract with Atomics International, a subsidiary of North American Aviation, Inc.

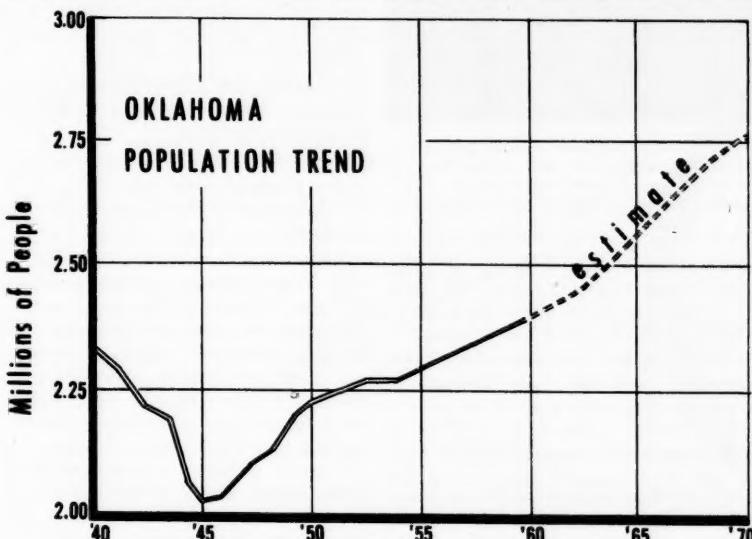
In addition to these two big companies there is the Grand River Dam Authority, a state agency, which produces water power from Pensacola Dam and its own Choteau Steam plant—serving an area in northeast Oklahoma.

The Southwestern Power Administration, a federal agency, with hydroelectric projects in eastern Oklahoma and Arkansas, largely supplies rural electric cooperatives.

Industrial Fuels

Since Oklahoma ranks high in the United States in the production of liquified petroleum gases, petroleum, natural gas and natural gasoline and coal, the state is favorably located to provide dependable and economical fuels. Chemical by-products of these fuels are being utilized in the rapidly expanding petro-chemical industry.

A complete system of pipeline, some 10,000 miles, distributes natural gas to almost every section of the state. Fuel oil, propane, butane and other petroleum fuels are available at low cost.



east of Tulsa. The first 175,000 kw unit will begin operating early in 1961.

Upon completion, the latter project will boost the company's total electric generating capacity to 975,000 kilowatts.

Public Service Company's 138,000-volt transmission system was enlarged in 1958 by the addition of 52 miles of line between Hobart and Red River. Providing an additional connection between the company's system and that of West Texas Utilities, the line went into service initially at 69,000 volts. New transmission facilities were built to take power from enlarged Tulsa Power Station into other load centers, and the company's distribution systems have been steadily expanded ahead of the growth in electric load.

Altogether, the company's investment

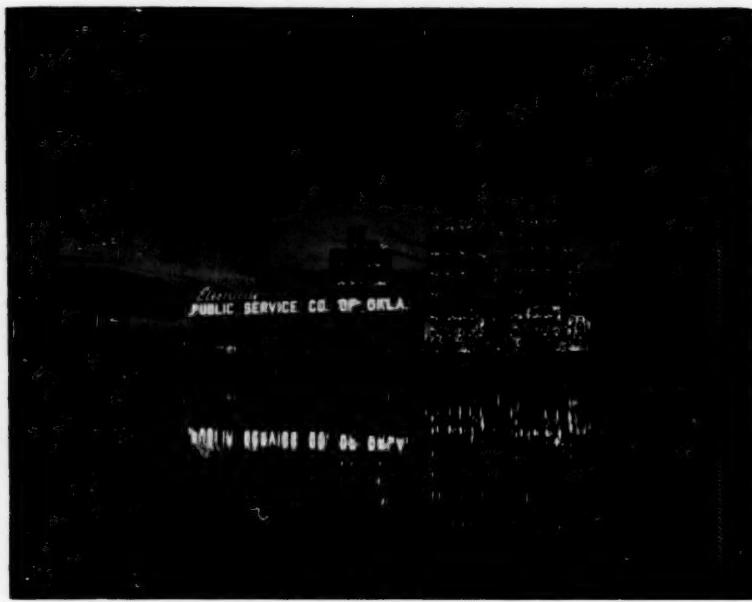
Oklahoma Supreme Court. It is now under discussion before the Federal Power Commission for determination of the equality of the rates by that commission.

Oklahoma Gas and Electric Company serves 245 communities in the state. During 1958 its expenditures for new facilities totaled \$31,489,000, the largest for any year in the company's history.

A new turbo-generator was placed into operation at the Horseshoe Lake Generating Station near Oklahoma City, adding 178,600 kilowatts to the system.

There were a number of additions to the transmission system, and the distribution system was expanded by the construction of 155 miles of new lines, along with numerous other improve-

OKLAHOMA



Reflected in the waters of the Arkansas River at dusk is the 500,000-kilowatt capacity Tulsa power station of Public Service Company of Oklahoma. Featuring outdoor type construction, the plant is considered as an outstanding example of the latest in electric power station design. A \$50 million expansion program completed in 1958 made this unit the largest electric generating station in Oklahoma.

As of May, 1959, oil and gas mining operations in Oklahoma provided employment for 48,500 persons. At the same time, manufacturers of oil field machinery and equipment employed 5,400.

The 1959 Oklahoma Directory of Manufactures and Products, compiled by the University of Oklahoma's Bureau of Business Research, lists 31 companies in the "petroleum and its products" category. Twenty-four companies are listed under "oil field and oil well specialties," while oil field equipment companies number 94.

A major supplier of natural gas to the state is Oklahoma Natural Gas Company, with headquarters at Tulsa. A general gas utility with an integrated transmission and distribution system, the company operates entirely within the state and serves most of the major cities and towns.

Altogether, Oklahoma Natural serves directly through its distribution lines more than 329,000 customers, or about 65 per cent of all gas consumers in the state. In addition, it serves at city gate the partial or total requirements of 40 communities.

Approximately 98 per cent of the company's gas requirements are purchased through more than 500 separate connections on the system, while the

balance of its requirements are furnished from 185-company-owned wells. In all there are more than 125 fields in Oklahoma from which gas is taken.

The company has more than 6,600 miles of transmission and distribution lines in sizes ranging up to 26 inches. To enable the company to stabilize its operations and to maintain its purchase of gas at a constant rate during the year, it has underground reservoirs near Tulsa, near Muskogee and between Tulsa and Oklahoma City. These three storages have ultimate capacities of 2.5 billion cubic feet, 11 billion cubic feet, and 57 billion cubic feet of gas, respectively.

The reservoirs allow the company's transmission system to operate near capacity throughout the year, and the likelihood of curtailments to customers during period of peak demand is lessened.

Altogether, Oklahoma ranks fourth in the United States in the production of liquid petroleum gas, fourth in petroleum, fourth in natural gas and fourteenth in coal.

Principal Minerals

In addition to the huge oil, gas and coal reserves, other principal minerals of commercial value in Oklahoma include the following:

Alabaster, asphalt, barite, brine, caliche, clay, dolomite, feldspar, glass sand, grahamite, granite, gravel, gypsum, iron ore, hematite, limonite, magnetite, ilmenite, kaolin, lead ore, limestone, manganese ore, metabentonite, novaculite, phosphate rock, quartz, salt, sand, stone, strontium ore, titaniferous iron ore, tropoli, volcanic ash, wool rock, zeolites, zinc ore.

The Transportation System

A glance at a road map of Oklahoma shows that the state has a remarkably complete system of paved roads blanketing its entire area.

Outstanding are the Turner Turnpike and Will Rogers Turnpike, both toll roads, which together extend from Oklahoma City, in the center of the state, northeastward to the corner of Oklahoma at the Kansas-Missouri border.

In other parts of the state multi-lane highways are already built, under construction or planned.

Altogether, Oklahoma's existing system of roads gives the state direct access in all directions to both near and distant markets.

Oklahoma also will be a center in the new National System of Interstate and Defense Highways. This system will include the two turnpikes and also will involve multi-lane highways fanning out north, east, south and west from Oklahoma City. Thus the latter will be on a direct transcontinental route extending from New York to Los Angeles, and on the north-south route extending from Laredo, Texas, northward to such centers as Wichita, Kansas City, Des Moines and Minneapolis-St. Paul.

More than half a hundred Class A truck lines, a score of motor bus companies and many smaller transportation companies serve 92 per cent of the cities in the state.

A specialty in Oklahoma is fast packaging freight service through good freight, carloading and forwarding companies and Railway Express. Oklahoma's own Mistletoe Express, Inc., also operates around the clock to give industry in the state service to all points within its borders.

Rail lines in Oklahoma are on major cross-country trunk lines, with excellent connecting services from many intermediate systems. It is noteworthy that all the trunk lines are dieselized.

Altogether, the railway systems extend to 76 of the state's 77 counties.

Complementing the trucking and rail

facilities, four of the nation's major airlines serve Oklahoma with around-the-clock service, including passenger, air freight, and air express. Also, a feeder airline serves outlying areas of the state and neighboring states, providing fast service throughout the area.

You may be assured, then, that no matter what type of plant you might have, facilities will be available to bring in raw materials, and to ship out finished products to the most distant markets.

Existing Industry

Of course such things as the petroleum industry and agriculture have long been very important in Oklahoma's economy, but in recent years there has been a rapidly increasing diversity in the state's industrial growth pattern. The rate at which new plants have been coming in also has been increasing steadily.

Note, for instance, that in the January through July period of 1959, there were 39 important new plants reported to INDUSTRIAL DEVELOPMENT and MANUFACTURERS RECORD magazine as having located in Oklahoma. All these are installations that employ or will employ 25 or more persons.

That seven-month total compares with 46 such new plants reported for the state in all of 1958 and 33 in 1957. Since the I.D. records include only those operations which were announced to employ 25 or more persons initially, the actual total of all new manufacturing enterprises in Oklahoma during the past three years would be much greater than the figures given here.

A further idea of the state's diversified industry expansion may be seen in these examples:

In a \$20 million expansion program last year, American Airlines added a jet maintenance and overhaul center at its Tulsa repair depot. Also at Tulsa, the "home-grown" Flint Steel Company moved into a completely new fabricating plant which has 364,000 square feet of floor space under one roof.

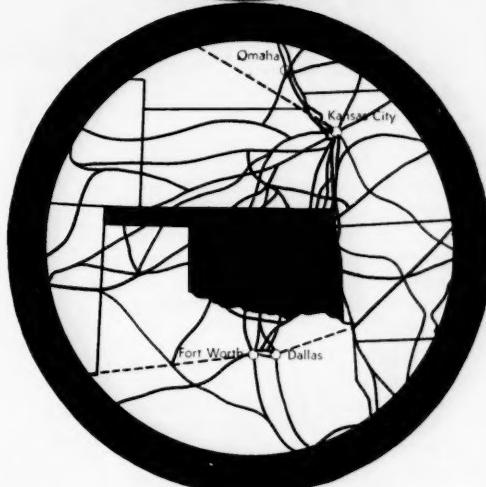
Seamprufe, Inc., has made McAlester the hub of its national operations, having completed there a \$300,000 expansion program. This included installation of full air conditioning and enlargement of the plant to 91,000 square feet. The company's accounting and credit department has been moved to McAlester, along with research and development facilities.

At Temple in southwestern Oklahoma

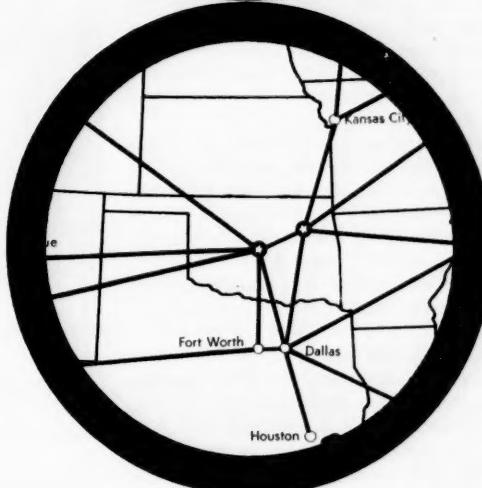
Oklahoma is literally on the crossroads of the nation's interstate highway system.



Major trunk rail lines serve the state and extend to 76 of the 77 counties in Oklahoma.



Airline connections fan out in all directions, with four major lines and one local line serving the state.



OKLAHOMA

the Temple Manufacturing Company has a new plant producing 1,200 pairs of dress pants daily. With 32,000 square feet of floor space, the air-conditioned plant employs more than 100 persons.

Another big expansion was the \$12 million program completed by D-X Sunray Oil Company at its West Tulsa refinery, and impressive new office buildings have been constructed in Tulsa by Skelly Oil and Amerada Petroleum Corporation. Also at Tulsa the Frisco Railroad recently completed a new \$5.5 million "hump-retarder" rail switching system.

Ideal Cement Company has made at Ada a \$20 million expansion, increasing plant capacity to 5.5 million barrels of cement annually, and pushing employment past the 400 mark.

New also is the \$38 million Navy high-energy fuel plant near Muskogee, a facility which ultimately is expected to employ as many as 2,000 persons. At Muskogee, too, is the new Fansteel Metallurgical Corporation's \$6.5 million tantalum-columbium plant.

At Oklahoma City the Federal Aviation Agency dedicated its \$15 million aeronautical center in June, 1958, and subsequently announced an additional expansion to cost \$5 million. Currently the agency employs around 2,000 persons, and more than 7,000 aviation students were scheduled for training during 1959.

Very important on the state's economic scene is the Oklahoma City Air Materiel Command (Tinker Air Force Base) which continues to grow. During fiscal 1959 payrolls at Tinker totaled \$115 million, and \$20 million was spent for new construction. In addition, the base made contract awards for various goods and services to Oklahoma firms at a total cost of \$37 million. Personnel at the base totals 20,000 civilian and 4,500 military.

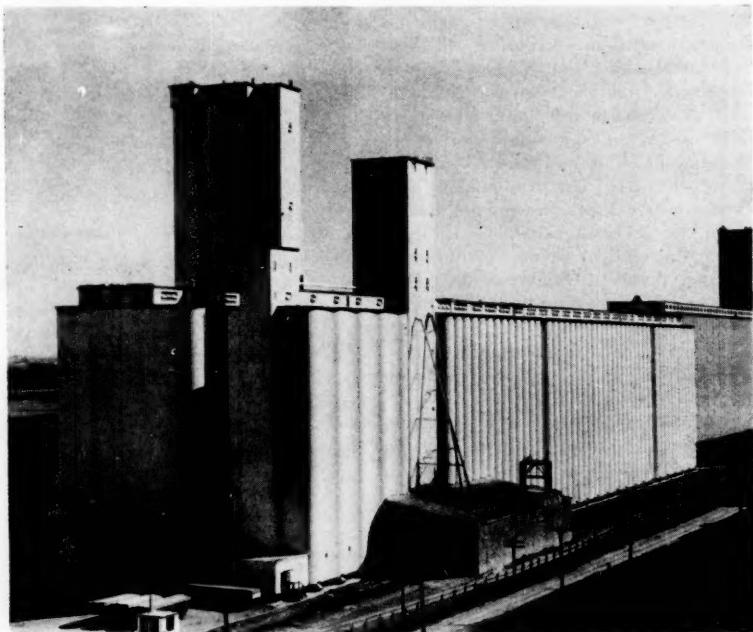
Outstanding among the new plants to be located in the state is that of Western Electric Company at Oklahoma City. Scheduled for occupancy late in 1960, the plant ultimately will provide employment for about 4,000 persons in the manufacture of dial switching equipment for the Bell Telephone System.

Among the big new projects that have been announced for Oklahoma so far in 1959 are these:

Glenn Berry Manufacturers, Inc., has a new plant at Commerce producing jeans and work clothes and employing more than 100 workers.



The Aero Commander, seven-place business airplane, is produced at the Aero Design and Engineering Company plant at Tulakes Airport near Bethany. The plant turns out about 15 Aero Commanders a month. The twin-engine craft range in price from \$64,700 to \$180,000.

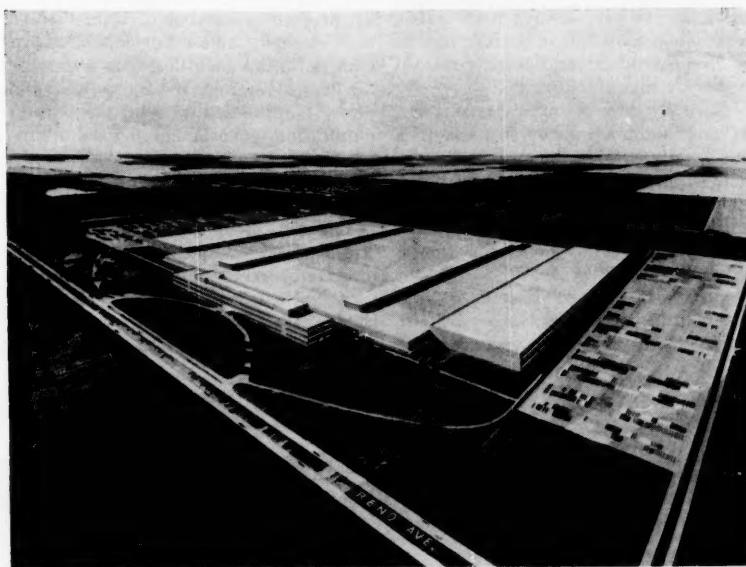


The huge Union Equity grain elevator in Enid has a capacity of 7,700,000 bushels. This installation attests to the importance of Oklahoma's grain output.

Continental Carbon Company has a \$2 million expansion project, slated for completion in the Fall of 1959, at Ponca City.

Debron, Inc., is building at Tulsa a new plant to produce greeting cards. To

cost \$1,250,000, the facility will have 200,000 square feet of floor space and 100 employees. And, Dewey Portland Cement Company announced a \$12 million plant to be located on a site northeast of Tulsa.



Under construction at Oklahoma City is this huge plant, shown in an artist's drawing, of Western Electric Company. To cost \$35 million, the plant will have 1.3 million square feet of floor space and will produce switch-gear for dial telephone systems. It is scheduled for occupancy in late 1960 and will have between 3,000 and 4,000 employees.



The Pryor, Oklahoma, plant of Deere and Company's Grand River Chemical Division was completed in 1952 at a cost of \$20 million. It employs approximately 250 persons in the manufacture of ammonia and urea for fertilizer from natural gas.

Sun Oil Company has just completed a new plant, costing \$3.5 million, at Laverne.

At Durant, Texoma Furniture Company announced a new installation to employ 66 persons in the manufacture

of maple finish bedroom suites.

So the story goes for all parts of the state. These new facilities attest to the fact that Oklahoma is becoming progressively more attractive as a location for many types of industrial operations.

Some of the reasons why this is true are brought out in the following comments from executives of plants in the state.

John M. Scott, Jr., Personnel Director of Blue Bell, Incorporated: "Blue Bell located in Oklahoma because we found a labor supply available which met our requirements and because of a location which would enable us to serve our growing western markets."

R. J. McBride, Assistant to the Advertising Manager, Container Corporation of America: "The principal reason for locating our corrugated plant in Oklahoma is because of its proximity to markets. . . . Oklahoma offers the best locale for effectively serving the growing central states. . . . Another reason for locating in Oklahoma is the availability of skilled personnel. . . . Worth mentioning is the fact that we have now gone 30 months without a lost time accident, which speaks highly of the native skills and dexterity we have found in our plant employees."

E. F. Tomlinson, President, B. F. Goodrich Company: "... The continued growth of this facility evidences the soundness of the decision to locate a plant in Miami, one of 90 locations studied at that time.

"The selection was made after full consideration had been given to the location with reference to the company's markets; ample water supply, adequate fuel and power facilities; road and rail transportation, and the availability of manpower.

"The company's experience as an industrial citizen of Oklahoma indicates a long, pleasant and productive relationship."

W. W. Yeandle, General Manager, Grand River Chemical Division: "Deere and Company decided in 1952 to engage in the business of producing and selling synthetic nitrogen products primarily for agricultural use. In selecting an Oklahoma site for the manufacturing facilities, the company was influenced by the availability of natural gas, electricity, steam and water in adequate supply and at reasonable cost; and, as was indicated by State Representatives, labor was readily available in the Northeast Oklahoma area."

Dr. Frank H. Driggs, President, Fansteel Metallurgical Corporation: "Power and people were major considerations that prompted Fansteel Metallurgical Corporation to choose Oklahoma out of 150 locations for its newest \$6,500,000 tantalum-columbium producing plant.

OKLAHOMA

"Exacting electric power requirements—enough to serve a city of 200,000 with high standards of consistency of service—were met by Oklahoma at exceptionally low rates.

"Oklahoma supplied the plant personnel—people with the necessary level of education and inherent skills to perform the highly technical tasks that produce these valuable metals—people with records of integrity, industry and stability . . ."

R. D. McCarthy, Public Relations Director, National Gypsum Company: "National Gypsum Company located its paper mill at Pryor, Oklahoma, for three prime reasons. Geographically, Pryor is strategically located for shipping paper to our gypsum plants. . . . Pryor also offers ample supplies of water and waste paper which are essential to the manufacture of our paper. And finally, Pryor, itself, is an up-to-date progressive community which our company considers essential for successful plant operation."

Harold S. Caplin, Vice President, Seamprufe: "The available supply of labor has always been reliable and the performance of our workers, after training, has equalled or surpassed most of our plants in the east. We have been given every cooperation by civic leaders in McAlester and Holdenville, the local communities in which we are located. There has never been a problem regarding an ample supply of all the necessary utilities. . . .

"We have found the regional location of Oklahoma most advantageous for supplying our customers all over the United States. Truck, rail and air facilities have constantly improved so that we can readily reach most markets within a relatively short time. . . ."

Joseph M. Crockett, Public Relations Manager, Fairchild Aircraft Division: "Shawnee's high quality labor, friendly community attitude and market proximity insure continued success for Fairchild in the center of this large aircraft producing area."

A. M. Rochlen, Vice President, Public Relations, Douglas Aircraft Company: "The volume of available local work force, comprised of above average individuals, has eliminated labor shortage problems common to some areas. Employee morale and willingness to do a good job is especially high, characterized by the lowest percentages of absenteeism and employee turnover of any of this corporation's nationwide manufacturing facilities. Oklahoma community

environments have always been stable, responsible, with full understanding of the requirements and objectives of large-scale manufacture.

"Natural water resources, electricity, gas and similar industrial necessities have been available in more than adequate supply. The climate of Oklahoma is ideal for aircraft manufacture, with weather interruptions to factory operation or flight-testing so rare as to be negligible . . ."

Laurens D. Dawes, Executive Vice President, Munsingwear, Incorporated:

up of quite a number of things which can be easily measured: labor supply, transportation facilities, fair wage and tax history, water, sewers, power, and understanding attitudes on the part of public and government toward industry . . .

"Taken together, the things Western Electric saw and felt in Oklahoma led us to believe we could operate efficiently and productively in the state. We found these and other qualities in Oklahoma City and selected it as the site for a large new plant to make telephone dial

THE FARM



Wheat is the largest cash crop in Oklahoma, and the prairie sections of the north and west constitute a great wheat belt. Shown in formation are combines ready to harvest a wheat crop. The level fields are well adapted to mechanized farming methods, and the growing season for soil crops ranges from 180 to 240 days.

"Munsingwear, Incorporated has located two factories in the State of Oklahoma and has found its employees to be productive and cooperative. The available electric power and water supplies, and the location in respect to national markets, has also been a favorable factor in setting up the mills."

Walter M. Reynolds, Director of Public Relations, Western Electric: "A company seeks a 'good industrial climate' when it is selecting a location in which to invest large sums of money for a new plant. Such a climate is made

switching equipment."

George W. Griffin, Jr., Vice President, Sylvania Electric Products, Incorporated: "The vital factor in Oklahoma's progress over the years has been the spirit, determination, and pride of its people. This pioneering spirit, which attracted Sylvania to Oklahoma, will be the priceless ingredient in the State's expanding role in the nation's economy."

Vigorous Work Force

In a Report on Oklahoma's Economy

made by the Governor's Economic Development Commission to the Governor and the members of the Twenty-Seventh Legislature of the State of Oklahoma, this statement was made about the labor force:

"A reserve of skilled and experienced industrial labor supply is developed only in a more or less industrially mature area... The economy of Oklahoma is in the process of emerging from the youthful state in which labor power is used primarily in farming and other extractive activities—utilization of min-

of great potential in the economic development of the state. Oklahoma's training program for all types of shop skills during World War II demonstrated that our unskilled and inexperienced labor supply on farms and in our towns and cities can be trained and adapted effectively to industrial employment within a short period of time. "Accumulating evidence shows a satisfactory experience in the employment of Oklahoma's labor by industries which have come into the state in recent years."

to the steady reduction in the number of jobless in recent months. Altogether, unemployment in May was 20,100 less than in the comparable month of 1958.

The pattern of wages paid in selected Oklahoma industries may be seen in these figures: In manufacturing average weekly earnings were \$82.21 in May, 1958; \$86.53 in April, 1959, and \$84.87 in May this year. In oil and gas mining, the figures were \$97.92, while in construction they were \$97.03, \$102.40 and \$96.75. Weekly earnings in retail trade were \$59.78 in May, 1958, \$60.49 in April, 1959, and \$60.49 in May this year.

Hourly earnings, given in the same order as the above, were: Manufacturing—\$2.04, \$2.09 and \$2.06; oil and gas mining—\$2.40, \$2.46 and \$2.45; construction, \$2.54, \$2.56 and \$2.58; retail trade—\$1.40, \$1.43 and \$1.43.

Following a decline which began in 1930 and gradually descended to a low point in 1945, the labor force in Oklahoma has been moving steadily upward. The figure was 797,000 in 1950 and 834,100 in 1955. The latest total, included the unemployed, is in excess of 900,000.

On the basis of these gains and up-trends in the state's population, the Bureau of Business Research at the University of Oklahoma's College of Business Administration has estimated that the labor force in the state should reach 1,188,000 by 1980.

The Bureau observed: "In the future, the size of the labor force will be influenced by conflicting forces. It will be held down by a lowering of the retirement age, but it will be swelled by the retention of more of our productive people through the increases in industrial employment and supporting industries.

"However, the farm labor segment of Oklahoma's economy can be expected to increase also in the not-too-distant future as the demands for food increase sufficiently to bring back more workers into the agricultural sector.

"As the economy of the state moves into high gear, an increase in the labor market can be expected in the number of housewives, handicapped persons, and older persons below the retirement age. These gains, along with a greater retention of the younger people who have been leaving the state in the past, will be the basis for the overall gains of the total labor force in Oklahoma."

You can see, therefore, that virtually

OF THE LAND



Rich soil and a favorable climate have gained for the Sooner State recognition as an agricultural area in the fields of both crop and livestock production. Beef cattle, like these shown here, predominate the livestock industry, and Oklahoma is internationally known for its herds of high grade pedigree Herefords, Aberdeen Angus and Shorthorns.

eral resources. Notwithstanding this historical situation, there are elements of growth in our supply of labor for industrial growth.

"The sharp and continuing decline in manpower required for more efficient agriculture is releasing thousands of farm youth for non-agricultural employment. Moreover, there are on farms in Oklahoma many thousands of under-employed workers in low income farm counties with small farms and low receipts from farm marketings.

"The farm source of labor is an asset

As of mid-1959 there were approximately 883,300 persons employed in Oklahoma in all pursuits, including agriculture. The number of persons working on nonfarm jobs was 553,300, according to a report by the Oklahoma Employment Security Commission.

The number of unemployed in the state was given at 37,500 for May this year, down from 41,400 in April. The commission pointed out that improved opportunities for employment in most lines of endeavor, particularly trade, service and manufacturing, contributed

OKLAHOMA TAX FACTORS

A tax study in which total state and local taxes are analyzed as a percentage of gross sales, provides a "common denominator" which makes tax comparisons easy and meaningful. It "washes out" difference in particular tax laws and shows the over-all picture of tax costs within the state.

Industry Group	Gross Sales	Oklahoma Taxes	% Taxes To Sales	Industry Group	Gross Sales	Oklahoma Taxes	% Taxes To Sales
Food Products	\$114,851,308	\$ 459,521	0.40%	Petroleum Products	22,487,348	170,492	0.76
Apparel Products	3,258,251	20,407	0.63	Stone, Clay & Glass	36,015,395	457,113	1.27
Lumber Products	10,069,577	157,004	1.56	Primary Metals	74,082,117	367,057	0.50
Furniture & Fixtures	5,485,639	29,826	0.54	Fabricated Metal Products	64,457,070	429,835	0.67
Paper Products	7,437,834	39,128	0.53	Machinery, Except Electric	20,990,254	132,090	0.63
Printing & Publishing	10,629,749	109,646	1.03	Transportation Equipment	47,964,768	292,835	0.61
Chemical Products	2,097,856	24,554	1.17	All Other Groups	36,362,580	237,022	0.65
Totals				Totals	\$456,189,747	\$2,926,530	0.64%

A particular firm contemplating an Oklahoma location may compare its own ratio of state and local taxes paid to its gross sales in present locations with the above table for similar manufacturing classifications in Oklahoma.

Source of data: Oklahoma Legislative Council.

any plant locating in the state from now on into the distant future may be assured not only of dependable, easily trained workers but also a constantly increasing supply of personnel to take care of continuous growth in plant operations.

Favorable Tax Structure

A study of the tax structure in Oklahoma shows that the state is not only one of the few states to reduce taxes since World War II but also is rare in that an operating deficit is impossible. The latter has resulted from a 1941 constitutional amendment which requires all state agencies to operate on a strictly cash basis. No indebtedness can be created except by a vote of the people. Deficit financing is impossible under this system, thus enabling the state to maintain a stable fiscal situation.

In 1947 the Oklahoma legislature reduced the corporate income tax rate from six per cent to four per cent, and there were corresponding reductions in individual income taxes. Unemployment compensation tax rates on employers of eight or more (now four or more) were reduced in 1949 and again in 1953.

The taxes to which business corporations, including manufacturers, are subject in Oklahoma are these:

1. Corporation organization fees are \$18 plus \$1 per \$1,000 of authorized capital in excess of \$10,000.

2. The annual corporation franchise (capital stock) tax is \$1.25 per \$1,000 of capital employed in the state. The initial organization fees are in lieu of franchise tax the first year. Capital borrowed for less than three years is not included in the tax base.

3. The general property, or ad valorem, tax on real and personal property is levied only for county, municipal and school districts. There is no state property tax levy.

4. The state corporation income tax rate of four per cent is federal income tax deductible.

5. There is a two per cent retail sales and use tax on items purchased, but important exemptions have been allowed for manufacturers.

6. The unemployment compensation tax has a 2.7 per cent maximum. A company qualifies for merit rating after one year of operation.

Further, there are no "production taxes," or any other kind of additional special taxes on manufacturing industries.

Of aid to warehousing and distribution industries is a 1955 act of the Oklahoma legislature which made the state a "tax free port." That is, interstate shipments of merchandise may be

warehoused in Oklahoma while in transit without being subject to ad valorem assessment.

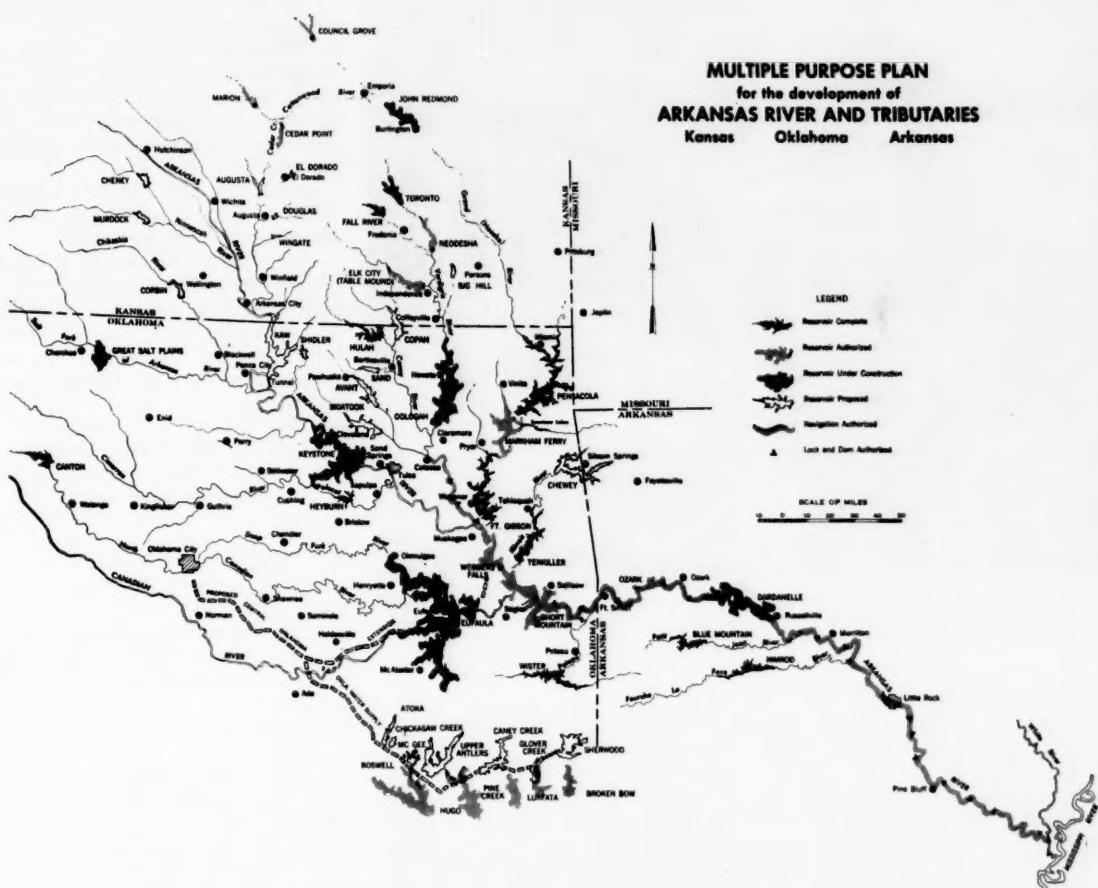
The petroleum industry, in lieu of ad valorem taxes, carries a substantial portion of the tax load through a five per cent gross production tax. To the extent that the oil industry pays large sums for the support of the state and local governments through taxes peculiar to its own operations, it follows that all other lines of business are relieved of that portion of the burden.

Exempt from the retail sales and use tax are machinery and equipment used in manufacturing, materials and supplies consumed, including fuels. Even sales of finished manufactured items for use out of the state are exempt, even though the item may be delivered at the plant in Oklahoma.

A special tax for textile mills has given the textile industry an advantage in Oklahoma. This is a special one tenth of one per cent tax on gross production, which is levied in lieu of ad valorem taxes.

Commenting upon what he calls "Oklahoma's remarkable tax system," Max Genet, Jr., Director, Department of Commerce and Industry, observes: "Closely geared as it is to the state's economy, and sensitive as it is to increased purchasing power, it has never failed over the past 15 years to

OKLAHOMA



The extensive Arkansas River Development program will benefit Oklahoma tremendously in the future. In addition to providing low-cost water transportation, the project will provide flood protection, hydroelectric power, additional water reservoirs and extensive recreational facilities.

perform better than was expected of it."

Water Resources

Oklahoma will benefit tremendously in the future with completion of the extensive Arkansas River Development.

During 1959 the Congress will appropriate some \$60 million to be spent mostly by the Corps of Engineers in Oklahoma in the next 12 months in the development of water projects principally in the Arkansas River development program.

In the long-range picture, it will take 12 or 13 years to complete the \$1.2 billion project. However, the Arkansas Basin Development Association, which has headquarters in Tulsa, comments that when it is done, "America's richest underdeveloped valley will be served by ice-free, low-cost water transportation. All history indicates the growth which

will follow will stagger the imagination."

Reservoirs under construction include Eufaula on the Canadian River, Dardenelle on the Arkansas River, Keystone on the Arkansas, Oologah on the Verdigris River, Toronto on the Verdigris, John Redmond on the Neosho and Markham Ferry on the Grand River.

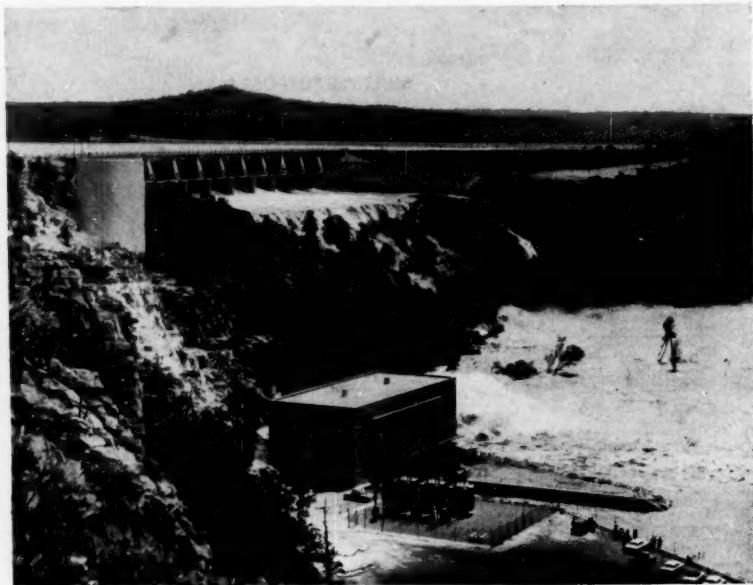
The Corps of Engineers estimates that the Arkansas-Verdigris waterway will carry an average of 13.3 million tons of freight annually. There will be a savings of about \$8.75 a ton in shipping steel from Pittsburgh to Tulsa. The cost of shipping coal from Fort Smith to New Orleans will be reduced about \$2.60 a ton, while the freight rate on wheat from Enid to Memphis will be lowered by about 11 cents a bushel.

The Development Association com-

ments further: "In addition to reducing freight bills, and making it economically feasible to market the rich storehouse of fuels and minerals in the Arkansas Valley, the project will provide protection from floods, hydroelectric power, municipal, industrial and agricultural water supplies, and a vast inland playground."

"Studies made by the Corps of Engineers indicate that over a period of 50 years the project will repay the nation's entire investment with interest, and \$240 million besides."

Further details on the water picture in the state may be gleaned from a speech by Senator Robert S. Kerr of Oklahoma. The talk was printed into the Congressional Record as of July 2, 1959. Here are some excerpts that are of particular interest to those concerned with future industrial development



Tenkeller Ferry Dam, which impounds water forming Lake Tenkiller, is a feature of the comprehensive plan for development of the Arkansas River Basin. This big lake is one of the outstanding recreational and beauty spots in Oklahoma.

prospects.

"Our most valued natural resource is soil. Then our next most valued natural resource and one which we have in such great abundance is water. Water for domestic and municipal use, water for irrigation, water for unlimited industrial growth, water and power, for recreation, water for the magic word of economic expansion, 'navigation.'

"When our presently authorized and proposed program is completed, high quality industrial water will be available from Oklahoma City, north, northeast, east, south and southeast at five cents per 1,000 gallons, or less . . .

"Nowhere can so much good quality water be conserved and made available at such low cost as in the eastern 60 per cent of Oklahoma . . .

"If we carry out our presently authorized and contemplated programs and let it be known, the industrial run into Oklahoma will make the run for land into the Cherokee Strip and other of our areas opened for settlement look like minor incidents and puny efforts . . .

"Among the many things in this waterborne future will be:

"1. More and more employment and jobs for the people of Oklahoma.

"2. The planning and building of bigger cities; a rapidly increasing population, with higher and higher per

capita income; an increasing demand here at home for the products of our farms, ranches and forests.

"3. Expanded trade and commerce for existing industries, and a rapidly growing influx of new basic industries requiring the further development and use of our vast resources of coal, oil, gas and other minerals.

"4. Expansion of existing and development of new basic chemical industries using great quantities of energy fuel and salt brine.

"5. Industrial production of huge amounts of products basic to further industrialization, including chlorine, caustic soda, and the myriad petrochemicals.

"6. Industries for the production of plastics, synthetic fibers and fertilizers.

"7. Expanded utilization of our sand, gravel, limestone, and rock asphalt products.

"8. The development of an electric power complex of such huge proportions as to rival that of the famed Tennessee Valley—and I say that completely aware that the TVA now uses 20 million tons of coal annually in its steam plants generating electricity to firm up and augment her vast hydro capacity.

"9. A rapidly expanding construction industry.

"10. An ever-increasing forest products industry.

"Oklahoma's future, waterborne, within the lifetime of some in the sound of my voice today, will see industrial payrolls and production each being measured in terms of billions of dollars per year . . ."

Concerning the broad Arkansas, White, and Red River Basins Development plan, the Senator added:

"As it moves to completion through the next 20 to 30 years, Oklahoma will have more than 400,000 surface acres of impounded water, more manmade lakes and canal surfaces than any other state between the Rocky Mountains and the Atlantic Ocean. This, together with our fine climate, our location on the nation's highways, will give Oklahoma a recreation industry beyond anything of which any of us has ever dreamed . . ."

Varied Agriculture

The 45 million acres of land in Oklahoma show more soil groups than in any other state. This, coupled with the wide variations in climate, has resulted in highly diversified agricultural production.

The growing season ranges from 180 to 240 days, while rainfall varies from 15 to 60 inches. Wheat is the largest cash crop, and the prairie sections of the north and west constitute a great wheat belt. The level fields there are well adapted to mechanized farming methods. In 1958 the state's wheat crop was valued at \$194 million.

Normally, second after wheat in value is cotton, while hay ranks third.

The musical "Oklahoma!" made famous the place where "the corn is as high as an elephant's eye," but it's broomcorn that is preeminent here, as Oklahoma ranks first in the nation in the production of that commodity.

Other important agricultural products include rye, sorghums for grain, pecans, eggs and chickens, oats, alfalfa, peaches, apples, pears and berries, watermelons, tomatoes, cucumbers, and many others.

The livestock industry is dominated by beef cattle, and Oklahoma is nationally recognized for its herds of high grade pedigree Herefords, Aberdeen Angus and Shorthorns. The number of cattle and calves on the state's farms and ranches is reported at well above three million.

In the South central part of the state is a section known as "Hereford Heaven," and another rich grazing area

is the Blue Stem Bowl around Pawhuska. Some 250,000 head of beef cattle are grazed on the more than a million acres of blue stem carpeted land in Osage County from early spring until frost. Approximately 90,000 breeding cows are kept on ranches in the county.

Figures from the 1959 Blue Book of Southern Progress show that as of the end of 1958 there were 116,600 farm units active in the state. Total output value was put at \$698 million.

The latter figure compares with \$597 million in 1954 and \$230 million in 1939.

Muskogee—Model of Progress

While much of Oklahoma's upsurge in industrial growth has been and is being sparked by aggressive leadership at the state level, little could have been accomplished, of course, without the full cooperation of the citizens at the community level in all parts of the state.

An outstanding example of what a particular city can do to improve itself may be seen in the case of Muskogee. I.D. made a survey in depth of what Muskogee has accomplished in order to give you a case study representative of what you may expect to find in Oklahoma today.

Located in the eastern part of the state in Muskogee County, the city has a population estimated at 43,000, while that of the county is 63,500. Current projections are that the city's population will reach 65,000 in 1970, and the county will increase to 82,000.

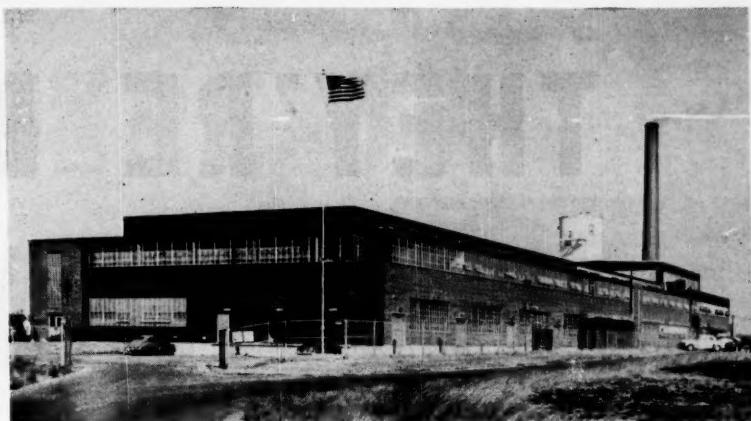
Long-time manager of the Muskogee Chamber of Commerce is Paul A. Bruner who has been and continues to be one of the aggressive leaders who have helped the city in its recent upsurge of progress.

Here, as outlined by Mr. Bruner, is what has happened:

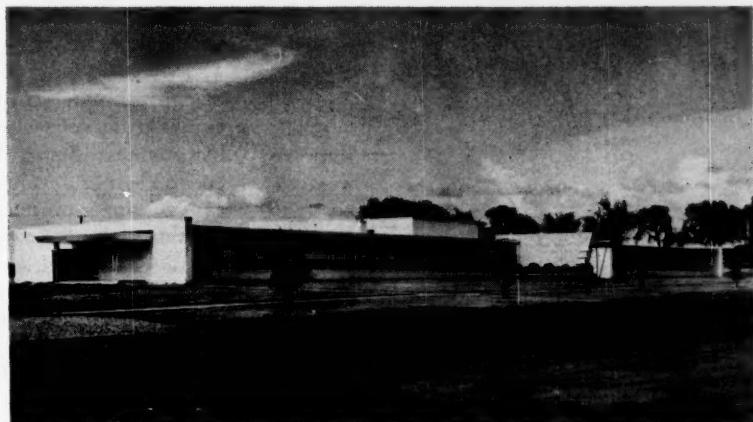
Bond issues, voted by the people of Muskogee, particularly within the past five years, pretty well mirror the story of Muskogee's new forward surge, industrial and otherwise.

Actually the bond issue story begins back in 1946 when it was necessary to finance re-construction of the city water treatment plant which had been all but destroyed by a tornado in 1945. This bond issue, voted November 11, 1946, was in the amount of \$1,165,000 and the treatment plant was almost completely rebuilt. At that same time the people also voted \$300,000 for sewer line extensions.

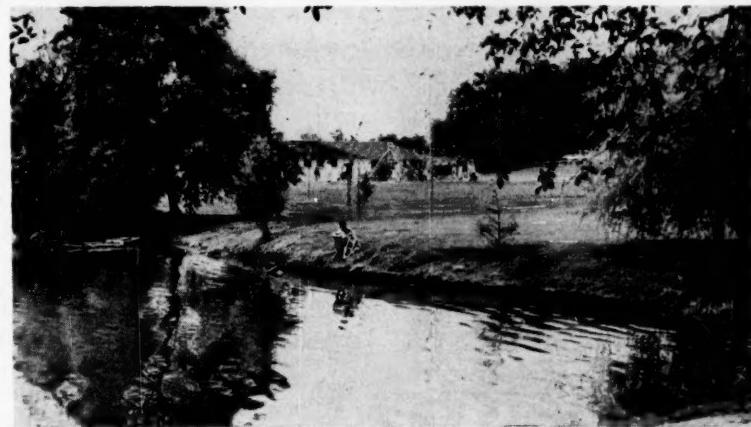
On December 1, 1959, the people



One of the well established manufacturing enterprises at Muskogee is the plant of Corning Glass Works. It was built at a cost of \$2 million.



The Tony Goetz Elementary School is one of the newer schools in Muskogee and typifies the progressive spirit there. A school bond issue of more than \$1.5 million was voted to enable school developments to keep pace with the city's growth.



The 100-acre Honor Heights Park is one of 22 parks in Muskogee, and the largest. Several years ago the park won the National Sweepstakes Grand Prize given by Better Homes and Gardens for landscaping and general beauty. At front is a portion of the lake, while the swimming pool is in the background.

THEY'RE BETTING



In cooperation with the Oklahoma Medical Research Foundation, the Frontiers of Science Foundation annually administers the Sir Alexander Fleming fellowship program in which the five outstanding junior science students in Oklahoma high schools work alongside prominent scientists for two months during the summer at the new research institute.

EPITOMIZING the new and broad emphasis on science and research in the state is The Frontiers of Science Foundation of Oklahoma, Inc. In operation since October 1, 1955, the Foundation has a membership of approximately 150 persons, and its money comes from subscriptions by individuals and by business firms. The Foundation's aims are (1) the development of effective and continuous communication of the meaning, the nature and the opportunities of the new frontiers to all citizens of the state; (2) the stimulation and support of innovation and improvement in education in science and mathematics, both pure and applied, especially at pre-college levels, wherever opportunity is presented; (3) the development of effective organization and process for the location, stimulation, and development of abler youth at pre-college levels, both statewide and in individual schools; (4) the enlargement and strengthening of university activities, especially in science and mathematics and (5) the location in Oklahoma of industrial research organizations which both need the public appreciation of science and technology which is growing in the state and which in turn can contribute to strengthening and extending that appreciation.

In a nation-wide address made from Oklahoma City, President Dwight D. Eisenhower observed. "Right here in Oklahoma you have established a superb mechanism for the mobilization of needed resources to strengthen our pursuit of basic scientific knowledge. It is the Frontiers of Science Foundation. You have reason to be proud of it. I hope other states will follow your example."

ON SCIENCE IN OKLAHOMA!



An important phase of the Frontiers of Science Foundation program is furnishing support grants to help finance research projects in Oklahoma's colleges and universities. Dean A. McGee (second from right), president of the Foundation and president of Kerr-McGee Oil Industries, Inc., presents checks to Dr. Sheridan Lee (left) and Dr. Beryl E. Clotfelter, both of Oklahoma Baptist University, and to Dr. Fred Allen (right), of Southwestern Oklahoma State College. The Foundation currently is supporting 12 research projects.



The Research Institute has available for its projects the University of Oklahoma's computer laboratory. In the near future an ultra high speed computer will be added to existing facilities. Competent programmers and machine operators are available to service all Research Institute projects.

The University of Oklahoma's plant science and zoology departments are equipped to conduct extensive research in the biological, bacteriological and botanical fields. Facilities include laboratories, animal house, and comprehensive laboratories for radiation experimentation and research.



Already well-blanketed with paved highways criss-crossing the state, Oklahoma has under way an extensive and continuing program of road improvement and road building. The three-level interchange on Highway 66 near Oklahoma City is indicative of the progress being made.

voted \$100,000 in bonds to acquire right-of-way for an access road to the city from the new routing of U. S. 62, and another \$70,000 to finance a new sanitary landfill garbage disposal project. I

Almost two years later, on October 1, 1952, Muskogee again voted two bond issues—one of \$50,000 to rebuild a new fire station in the heart of the downtown area and another for \$150,000 to modernize and bring up to state requirements the swimming pools in our two largest city parks.

But the real surge started in January, 1954, when the people voted \$2,000,000 in bonds to construct a 48-inch water conduit, or "flow line," from the Fort Gibson Reservoir, six miles from our water treatment plant. This, carrying by a four to one majority when many old-timers said it couldn't even be passed, really gave Muskogee the impetus that carried it forward to a new high in civic consciousness and the resulting industrial development. Undoubtedly a real factor in the attitude

of the people was the announcement at about the same time that the Oklahoma Gas & Electric Company was to spend \$24,000,000 in the construction of a new 205 KW power plant just east of Muskogee, increasing its power potential there by six times the volume of the original plant.

Cost of the 48-inch flow line was only slightly more than \$1,300,000 and the balance of that bond issue was used to increase filtration facilities at the water plant and to extend water service lines sorely needed in the expanding city. Shortly afterward, the federal government through congressional action paid the city of Muskogee \$200,000 as damages incurred by the city to its water supply source, the channel of the Grand River, by virtue of the construction of the Fort Gibson Dam on that same river above the city's water intake.

Of this amount \$49,400 was used for further improvement of the water department, \$51,000 went for new equipment for the fire department, \$94,000 for acquisition of land, runway right-

of-way, and general improvement of Davis Airport to prepare it for reactivation by the U. S. Air Force; and \$5,600 was used to purchase new traffic lights.

But, back to the bond issues.

In 1956 bonds in the amount of \$1,383,000 were voted for the construction of a new Municipal hospital—a 125-bed affair which—with a federal (Hill-Burton Fund) grant of \$665,000, gave the city a new, ultra-modern \$2,000,000 institution. That hospital was formally occupied in April, 1959, and in the spring of 1959 another Hill-Burton fund grant of \$192,762 enabled the start of construction of a new 50-bed wing to make it a 175-bed hospital.

Following closely on the heels of the hospital bond election came another bond issue of \$1,875,000, dated October 1, 1956, for expansion and extension of the city's sewer system, largely to serve expanding industries and new housing developments. This was a prerequisite to the construction of the new \$1,900,000 Container Corporation of America plant on a 25-acre industrial site that otherwise would not have had adequate sewer service.

But Muskogee was not through yet. Early in 1957 two more bond issues were voted. One was for \$1,140,000 for water line expansion including a new 30-inch main to serve both the new \$6,500,000 Fansteel Metallurgical Corporation plant and the new \$38,000,000 Callery Chemical Company plant, as well as to serve several new housing developments at the east edge of the city. This new main supplemented the two existing 24-inch mains from the treatment plant to the city.

The other bond issue, voted at the same time, was for \$48,000 to modernize and extend the downtown and residential traffic signal system.

As a result of these many bond issues, Muskogee as of June 30, 1959, had a bonded indebtedness of \$6,403,623. But the people seem to feel that a city without a bonded debt is a dying city, and Muskogee in the past five years has proved that these bonds it has voted on itself comprise one of the best investments the people ever have made.

While all this was going on, and as a natural result, these other things were taking place:

Citizens of both Muskogee and Muskogee County voted \$650,000 in bonds to acquire right-of-way so that a new four-lane divided highway could be built (now completed) on U. S. 62 northeast of the city to serve both the Callery and Fansteel plants.

A school bond issue of \$1,530,000 was voted to enable the schools to keep pace with the city's growth by adding classrooms or other facilities to school buildings where needed and to modernize others in various ways. Even as this is written a site has been acquired and the machinery set in motion for yet another elementary school in the rapidly growing east side of the city.

The people of Muskogee subscribed about \$350,000 to match private gifts and bequests of more than \$450,000 to build a new joint YMCA-YWCA building that, when finished, will be an almost \$1,000,000 institution. Construction is well under way.

A new \$2,000,000 shopping center, with 19 units, the first worthy of the name to be built in Muskogee, has been in operation for over two years.

Housing construction has literally leaped forward, with 11 housing developments of various size and of varying priced homes under way, giving Muskogee an average of almost 300 new homes a year for the past three years.

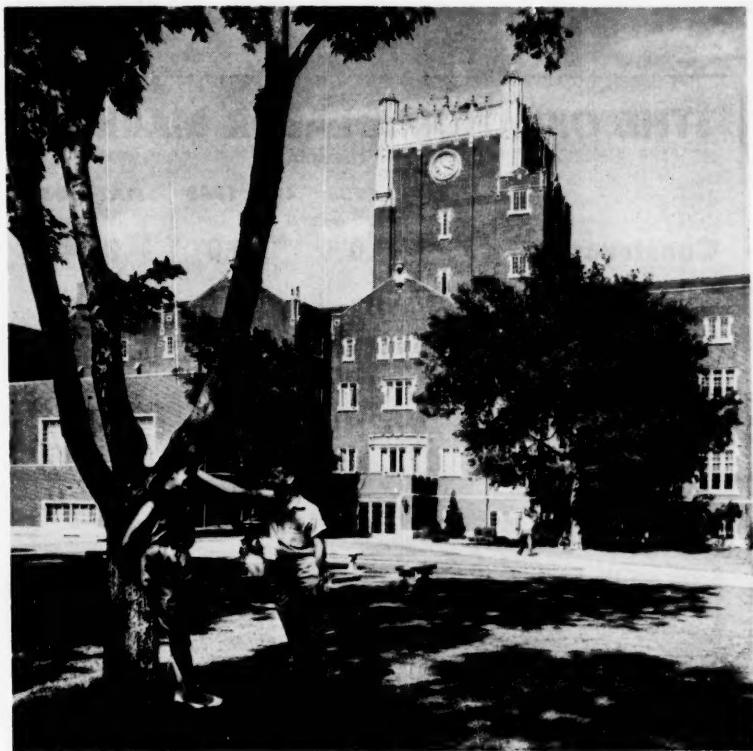
Davis Airport, all but abandoned after World War II, has been reactivated and now is the home of the 65th Troop Carrier Squadron of the 10th Air Force Reserve.

Most of the large churches in Muskogee (there are 82 churches in all) have added either spacious auditoriums (or sanctuaries) or new educational buildings to expand their church facilities.

Uncle Sam has helped with new school expansion in one or two instances and two other federal grants, not specifically mentioned above have contributed to Muskogee's progress—\$180,000 toward the cost of a new \$630,000 sewage treatment plant and \$150,000 for a new sewer outfall line.

Playing no small part in all of this development in Muskogee has been the Muskogee Industrial Foundation, organized in the fall of 1946 by 122 Muskogee business men who bought stock only with the thought of enabling Muskogee to attract new industries or to help existing industries expand.

Like most such agencies it operates as a revolving fund from which loans are made at low, and on one occasion, no interest rates in providing sites or buildings or both for industrial operations. It originally was capitalized at \$100,000 but two years ago that was increased to \$150,000. Today virtually all of its money is working—for Muskogee industries. Here is what that agency



Oklahoma has made generous provisions for financing education, with the result that the state now has an unusually high literacy rate. This is the Student Union Building on the beautiful University of Oklahoma campus at Norman. The University has 10 degree-granting colleges.

has done:

In April, 1948, loan of \$100,000 to Container Corporation of America to construct new plant at Muskogee. (this loan paid back in nine months.) New operation.

January, 1951, loan of \$45,000 to match like amount of Muskin Manufacturing Company to build a new furniture plant. New operation.

April, 1953, a second loan to Muskin Manufacturing Company to expand its Muskogee plant.

December, 1953, loan of \$25,000 to Coburn Manufacturing Company to expand its existing facilities.

August, 1955, loan of \$21,000 to move Royal Casket Company to Muskogee.

October, 1955, loan of \$30,000 to construct new plant for Synar Ceramics Company. (The company had to abandon existing plant at Davis Airport when latter was reactivated.)

October, 1957, loan of \$40,000 to Coburn Manufacturing Company for further expansion of its plant in Muskogee.

September, 1958, loan of \$30,000 to Industrial Electric Machine Company to assist in building a new plant and to move that operation here from Kansas.

In addition, the Foundation handled the matter of land acquisition for the new \$6,500,000 plant of the Fansteel Metallurgical Corporation; to provide a new site for the Oklahoma Natural Gas Company Service Headquarters; to provide a new site, and rail trackage, for the new \$1,900,000 plant of the Container Corporation of America, and to acquire a site for the new \$250,000 plant of the Acme Engineering and Manufacturing Corporation.

Planning Programs

While Muskogee has been cited as a particularly outstanding example of community progress in Oklahoma, there are, of course, many other cities and towns in the state which have continuing and aggressive programs to make their areas better places in which to live and to do business.

Providing leadership for promoting these programs in the state is the Com-

THE OKLAHOMA LABOR MARKET

(figures in thousands)

MAY, 1958 APR, 1959 MAY, 1959

Construction	32.0	30.0	34.4
Mining	48.3	50.6	50.8
Manufacturing	82.9	84.4	82.8
Trade	126.1	125.6	126.7
TOTAL	289.3	294.6	294.7

Source: Oklahoma Employment Security Commission, Research and Planning Division



Founded with the run of April 22, 1889, Oklahoma City has been the state's largest city since statehood and is the seat of the state's government. It is important as an oil producing center and has rapidly developing manufacturing complex. This air view shows the downtown business area.

munity Development Section of the Oklahoma Department of Commerce and Industry.

As part of its community aid program, the Section has set up a guide which summarizes the provisions of Section 701 of the Housing Act of 1954 which provides that Federal funds are available, on a matching basis, to those communities that desire local planning assistance. The guide also suggests ways in which a community may set up a local planning commission and the procedure to follow if they wish to qualify for Federal funds.

To get assistance under the program, the community must have (1) an official planning board—ordinances to show establishment; (2) adequate authority—a resolution showing authority for the study; (3) the ability to support the community's share of the cost of the program—a resolution showing appropriation of funds and (4) the facilities and intent to carry out a progressive and continuing program of urban planning.

After these qualifications have been met, the city then makes application for assistance through the Community Development Section. The latter also provides guidance in the moves that have to be made to meet the qualifications.

According to James N. Miles, urban planner with the Department of Commerce and Industry, as of July this year 16 communities had programs underway and seven had applications pending.

A typical example of such a program was the "General Plan Study" for Shawnee. The plan for development of that city was prepared by the Institute of Community Development of the University of Oklahoma, through the university's Research Institute, and under contract for the Department of Commerce and Industry. The study, in bound form, covers 72 pages.

The comprehensive nature of the report may be seen in the fact that it presents in detail the following factors:

Land and people, physical features and urban growth; recommendations for urban expansion in the Shawnee area, population, the subdivision of land, establishing minimum standards for land development, the use of land, the land use plan, the general plan, zoning, street and highway traffic, functional classification of streets, traffic patterns in Shawnee, the major street system, traffic accidents, areas for public recreation and education, recreation

as a part of community life, standards for recreational and educational facilities, existing and proposed educational and recreational areas for Shawnee, policies relating to acquisition of park land, and a recommended policy for the acquisition of park and school land.

Obviously, with the results of such a study as this to go on, the community is in a position to move forward on the basis of the best possible planning for the long-range future. That augurs well for any manufacturing operation that happens to choose such a community as a place in which to locate.

Development Foundations

Providing further aid to plant location are the community industrial Development Corporations that have been organized in Oklahoma.

As of July, 1959, there were 70 such foundations fully organized in towns and cities in the state. That compares with 46 foundations in operation a year previous.

Each of these foundations has some type of industrial finance plan to help companies interested in the particular community.

To be voted on in the near future is a proposal for the state to provide a fund of at least \$10 million and possibly \$20 million to be used in assisting Oklahoma communities in their industrial development activities.

Just as it gives assistance in the community planning programs, the Community Development Division of the Department of Commerce and Industry provides help in organizing industrial financing plans at the community level. The current aim is for Oklahoma to have at least 100 towns with finance plans in order that the state will be in a better position to attract its share of new industrial activities.

Oklahoma City

Oklahoma City, the state capital and the largest community in Oklahoma, is situated in the center of the state and has a population of well over 400,000.

An attractive city, with wide streets, it shows evidence of the oil wealth which exists in Oklahoma by having oil derricks scattered all around, even on the grounds of the State Capitol Building.

In addition to being the seat of state government, Oklahoma City also has—as was mentioned earlier in this report—the huge Tinker Air Force Base and the big Federal Aviation Agency installation.

Altogether, as of May this year, the city had 44,700 persons employed by state and Federal government activities, which gives a high degree of stability to the city's economy.

Total employment in Oklahoma City was estimated at 158,900 in May, up from 187,800 in April and 183,700 in May, 1958.

Next after government, the largest employer, were 37,500 persons engaged in wholesale trade, while manufacturing employed 18,100.

Under the leadership of Stanley

the expanding industry within the immediate Oklahoma City area.

Also as a part of the program Oklahoma Industries has constructed a number of industrial buildings which have been leased or sold to industry. Further, it acts as agents to obtain additional financing through pension trust fund insurance companies, and so on.

Offering a complete package plan to incoming industry, the corporation has facilities to design and engineer industrial plants and is ready to prepare proposals to industry, including design



American Airlines' Jet Maintenance and Service Center at Tulsa is one of Oklahoma's outstanding installations. Built at a cost of \$30 million, the center provides employment for 5,000 workers and has a million square feet of space.

Draper, managing director of the chamber of commerce, Oklahoma City has developed a strong development program.

As explained by Paul Strasbaugh, manager of the Industrial Division of the Chamber of Commerce, Oklahoma Industries is an industrial development corporation managed by Mr. Strasbaugh's department. The corporation is in the business of acquiring industrial property, developing it for industrial use from the standpoint of facilities and utilities, and then making the land available for incoming industry, or to

of the building and cost of the structure on a lease-rental basis. This is done without obligation to interested manufacturers and distribution firms.

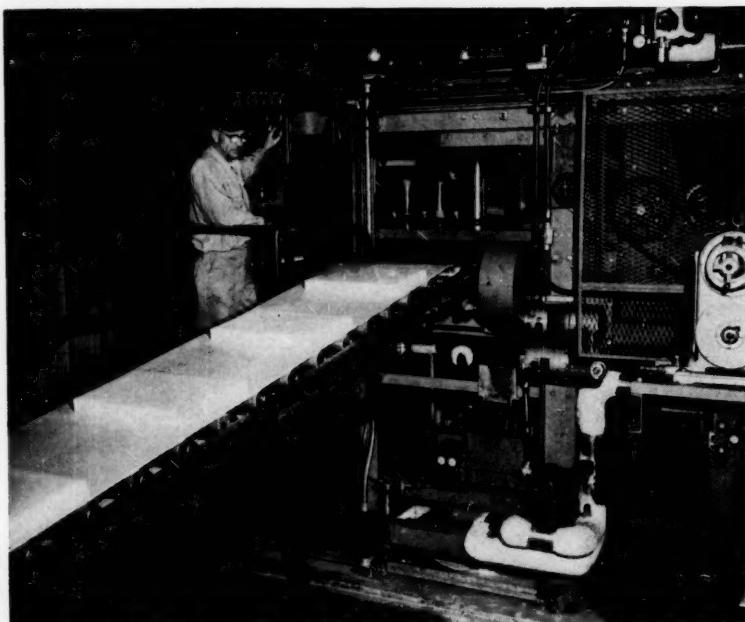
During the 10 years that this unusual corporation has been in business it has enjoyed a remarkable growth, since in that period it has developed and promoted approximately \$60 million worth of industrial plants and property.

The Oklahoma City Airport Trust is an agency set up to finance industry that requires a location at either the Municipal Airport (Will Rogers Field) or at Tulakes Airport, the city's secondary airport.

OKLAHOMA



Being situated close to the geographical center of the United States, Oklahoma has a favorable position in the nation's air traffic pattern. Airlines serving the state are TWA, Braniff, American, Continental, and Central. This view is of the terminal building at the Oklahoma City Municipal Airport.



An example of a company located in one of the smaller communities is the plant of Continental Oil Company at Ponca City. Shown are slabs of finished dairy wax coming out of the production machine.

The original \$13.5 million construction of the F.A.A. Aeronautical Center on Will Rogers Field was financed through an arrangement with the Airport Trust. Subsequent financing from this same source will further expand the facility's plant value to in excess of \$20 million. The trust will own this property until such time as the financing is paid off through the long-term lease and, at that time, the property will become a part of the City of Oklahoma City.

An interesting aspect of entering into an arrangement with the Airport Trust is that ad valorem taxes do not have to

be paid on the real estate because it was never in the hands of a private group.

The Trust, through the chamber's Industrial Division which acts primarily as its agent, is in a position to prepare proposals and put together the entire financing package on any facility located on one of the airports. The types of industry which can be financed by Trust are limited, however, to aviation industries.

Concerning the third method of financing, Mr. Strasbaugh noted that there are a number of individuals who are in the business of building and leasing industrial facilities here. These

individuals are reputable and established brokers who operate on an individual basis in cooperation with the Industrial Division.

The "Oil Capital"

Tulsa, Oklahoma's second largest city, claims the title of "Oil Capital of the World." More than 300 oil companies have their headquarters in Tulsa, and there are many manufacturers of oil field supplies. Founded before the War Between the States by the Creek Indians, the city remained a small village until discovery of oil in the Glenpool area.

The current population estimate in the city is 265,000, while that of Tulsa County is 341,250.

Latest figures from the Oklahoma State Employment Service show that Tulsa had 139,600 persons at work in May, 1959. Of that total, 29,100 were in wholesale and retail trade, and 27,700 were in manufacturing.

An example of the high rate of business in the city may be seen in the fact that retail sales in Tulsa totaled \$40,581,124 in April, 1959, up from \$35,806,920 in the like 1958 month. This was an increase of 13.3 per cent.

One of the newest plants announced for Tulsa is that of Allied Graphic Arts, Inc., printers of Sperry & Hutchinson Company's S&H Green Stamps.

To supply the stamps to a 14-state area, the plant will employ 80 persons initially, and this is expected to increase to 200 within five years. The Tulsa operation will operate under the name Allied Stamp Corporation and will be located in a specially designed building in the Sand Springs Industrial area.

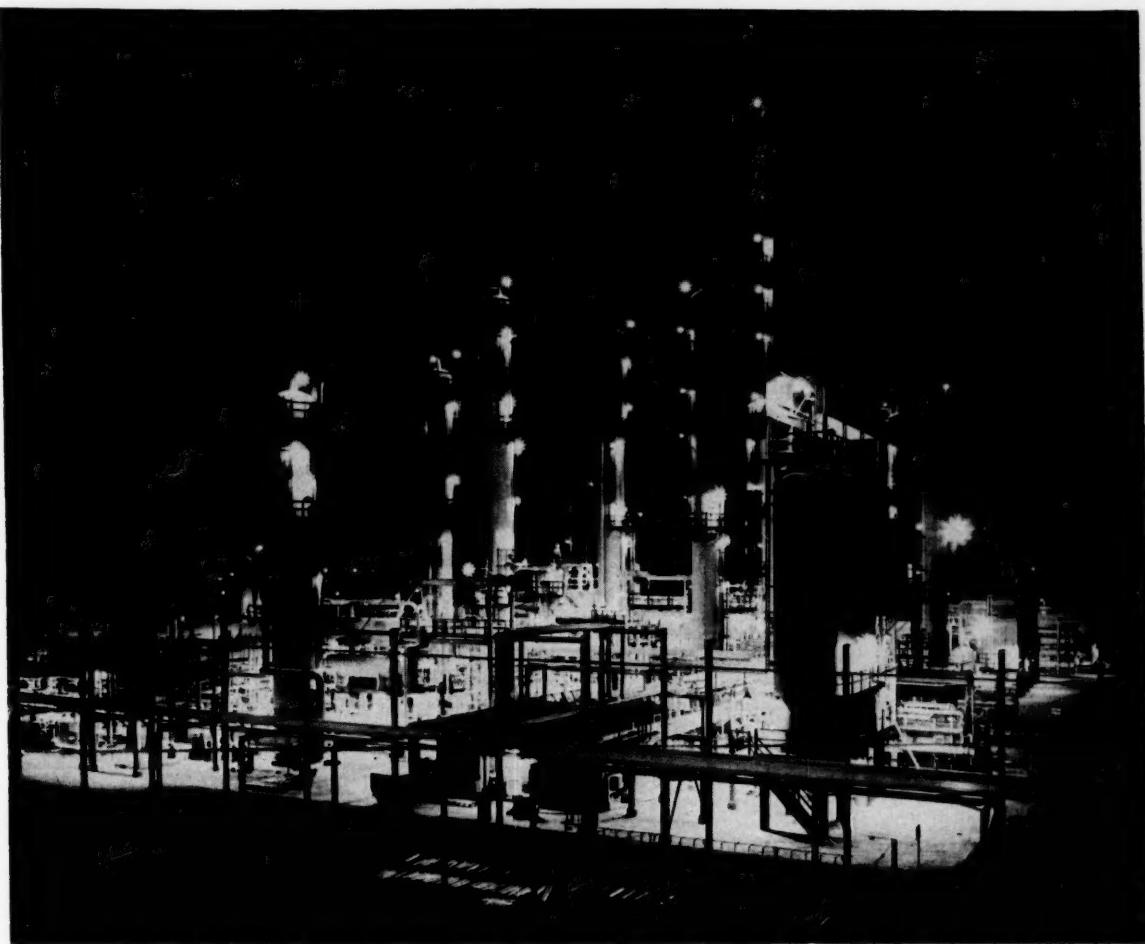
Douglas H. Timmerman is executive vice president of the Tulsa Chamber of Commerce. He is currently president of the American Chamber of Commerce Executives Association.

Fast-Growing Lawton

Oklahoma's third largest city is Lawton which is in the Southwestern part of the state in Comanche County. The city population is 62,000, while that of the county is 77,000.

Located in the Wichita Mountain area, Lawton is 1,116 feet above sea level and has a mean annual temperature of 60.50 degrees. The city is in the center of one of Oklahoma's most popular recreational areas. There are 28 lakes with fine sand beaches, fishing facilities, scenic drives and boating and bathing.

Adjoining Lawton on the north is



Completed in early 1959, the \$12 million high octane gasoline fractionating section of the DX Sunray Oil Company at Tulsa is the forerunner of a larger expansion program the company has announced for the oil capital. Construction was started in September on a \$7 million solvent de-waxing plant for DX Sunray, and this unit is scheduled for completion in August, 1960.

Fort Sill, the U. S. Army Artillery and Guided Missile Center. The Artillery Museum there is filled with relics showing the life of the Comanche and other Indians of this section.

An annual event which attracts thousands of visitors is Lawton's nationally famous Wichita Mountains Easter Sunrise Service. Included in the service are more than 50 scenes from the life of Christ, from His Birth to the Crucifixion and Resurrection.

Latest available figures on employment in Lawton showed 17,725 persons at work. Of that total, 13,400 were wage and salary workers, while 1,275 were in manufacturing.

The city has planned industrial sites to offer industry, and one of the newest plants to be located in Lawton is that of Town and Country Mobile Homes.

Milton Keating is manager of the Lawton Chamber of Commerce.

Rich Traditions

A part of what makes Oklahoma a pleasant and interesting place to live is the rich tradition of its short but colorful and turbulent history.

For example, little more than a half century ago Oklahoma was an Indian commonwealth. Farming and ranching were the principal occupations. The land was sparsely settled, and towns were small.

Oklahoma's Indians aren't just part of her history; they're part of her life. Many of the state's leading citizens are of Indian descent.

First institutions of free public education in Oklahoma were the Cherokee Male and Female Seminaries, estab-

lished near Tahlequah in 1851. The state's first newspaper was the Cherokee Advocate, published at Tahlequah in 1844.

Indian culture and traditions are being preserved by Bacone College, a fully accredited school for Indians near Muskogee, by the Indian Weavers at Tahlequah and the Inter-tribal Crafts Association at Anadarko; and by the Indians themselves, who keep their tribal games and ceremonies from being forgotten by holding pow-wows during the summer months.

The Indians have left their mark on Oklahoma politically, as well as culturally. For almost 100 years before statehood, the Five Civilized Tribes (Choctaw, Cherokee, Creek, Chickasaw and Seminole) maintained separate governments of their own in what is



A characteristic of Oklahoma is the availability of thousands of acres of flat to rolling land which is well suited for development as plant sites. An example is this industrial site at Poteau, between the main line and a siding of the Frisco Railroad.

now the eastern half of Oklahoma, maintaining diplomatic relations with the United States and with Indian tribes around them.

The Indians have influenced Oklahoma politics in yet another way. Located, as they were, between lands held by the Spanish, French and English, members of the Five Civilized Tribes became very skillful in playing one nation off against the other. This primitive statesmanship, plus skills learned in handling their own tribal affairs, gave the Indians a knowledge of diplomacy that enabled them to take the lead in state politics. Many of the men who helped write the Oklahoma constitution were of Indian descent, as have been several of her governors, U. S. Congressmen, state legislators, and other political figures.

Beginning in 1889 the Indian's western lands were opened to white settlement due to government claims that the Indians had forfeited their claims to land by participating in the Civil War on the side of the Confederacy. In May, 1890, Congress passed the Organic Act, providing for a territorial government, and for a time, Oklahoma Territory and Indian Territory existed side by side.

As the country all around Oklahoma filled up with white settlers, the Five Civilized Tribes fought a losing battle against encroachment of the white man. The white settlers had no part in tribal government; they had no legal claim to the land on which their homes were built. It was inevitable that they, like

the other white men eyeing the rich Indian grazing lands across the border, should agitate for the opening of Indian Territory to the white man.

In 1893, the five Indian nations were approached by the Dawes Commission to persuade them to relinquish tribal title to Indian lands. The federal government, under authority of the Atoka Agreement, through the Dawes Commission, made arrangements for the allotment of the Indian Territory to the members of the various tribes. The lands not so allotted were reserved for sale by the federal government, with the sales proceeds prorated to tribal members. The completion of the work of the Dawes Commission paved the way for combining Oklahoma and Indian Territories and their admission to the union as the State of Oklahoma in 1907.

To celebrate the state's 50th anniversary in 1957 colorful parades, rodeos, Indian ceremonials and pow-wows were held.

An unusual attraction in Oklahoma will be the National Cowboy Hall of Fame and Museum which is now under construction atop a hill overlooking the north expressway near Oklahoma City. A joint project of 17 western states, the Cowboy Hall of Fame ultimately will cost \$5 million. The first phase is

. . . a note from the governor

We in Oklahoma are proud of our young state, and of the progress it has made in its first 52 years.

In this relatively short period of time, we have come from a brand new frontier to a modern technical society.

Long known for its agricultural and petroleum products, Oklahoma is becoming more and more a state of diversified industry. Our central location places us in a strategic location in regard to markets. Our Oklahoma workers are above the national average in productivity.

And, in Oklahoma, we have instilled in the people and in all branches of government, that combination of circumstances referred to as a "favorable business climate."

Oklahoma is the state without a tax increase for more than 20 years, during the same period that the federal government and other states have increased time and again.

It has actually reduced the income and corporate tax and unlike some states Federal taxes are deductible first. The budget is balanced. It must be, under a state constitution which prevents legislature from spending more money than will be raised by taxes. There is no state debt.

There is no ad valorem tax in Oklahoma against property for state purposes. Property taxes support schools, city and county governments only, and under a new constitutional amendment assessed valuation in no case can be more than 35 percent of the fair sales value.

The 70 local industrial foundations (with still more being formed) in Oklahoma are another indication of our favorable attitude toward industry. Our people want new industry, and work to get it.

Evidence of the successful operation of industry in Oklahoma is the fact that practically every national industrial concern operating in the state has expanded at least once since locating here.

A good place to live and a good place to work, that is what we in Oklahoma think of our young state.

J. Howard Edmonson,
Governor, State of Oklahoma



Oklahoma's majestic state capitol building stands literally in the shadow of oil derricks, and it is the only capitol in the world which has producing oil wells beneath it. The five-story structure has eleven acres of floor space and 650 rooms.

scheduled for completion in August, 1960. The initial above-ground work includes the Hall of Fame section, a museum section, offices and service areas, as well as a parking lot. Oklahoma city was chosen as the site for the project after a thorough search of the West for the best possible location.

The very newness of Oklahoma, which places her nearer, in point of time, to pioneer society than any other part of the nation, has aided in keeping alive the glories of the past.

Facilities for Fun

Fishing, hunting, swimming, water skiing, boating, sightseeing . . . whatever your mood . . . Oklahoma has the answer.

Good modern highways lead into the beautiful mountain sections of Oklahoma. You will enjoy driving through

the wooded Ozarks of the northeast, the pine clad Ouachitas of the southeast, the Arbuckles of the south central and the Wichitas of the southwest.

In all these areas are surprises to delight you around almost every curve, and many points of historical or natural interest to enrich your trip. In the Wichitas you will see the Federal Wild Life Refuge where one of the largest remaining herds of buffalo is maintained, and where the famous longhorn is preserved from extinction.

In the Arbuckles an ancient upheaval has turned mountains on their sides, so you can see and read the geology of the Oklahoma oil fields as you drive along the highways.

For the fishing enthusiast, you have a choice of stream fishing in beautiful clear water or fishing in one of the big lakes that give Oklahoma a total of

nearly 1,000 square miles of inland water.

The mild climate makes fishing possible every day of the year. On occasional cold days you can fish in enclosed heated docks at various locations.

Many anglers prefer the seclusion of timber-lined streams for their fishing pleasure. Eastern Oklahoma, in the mountainous sector, has several from which to choose, including rivers such as the Kiamichi, Black Fork, Little, Glover, Grand, Arkansas, Mountain Fork and the Illinois. Float trips are especially inviting on the Illinois and Mountain Fork.

Boating and water sports will surprise you in Oklahoma. The state's man-made lakes are among the largest anywhere and provide water sports of all kinds.

Many unique features are installed at

OKLAHOMA

Oklahoma's beautiful lakes, including floating fishing docks, heated, complete with television! You can enjoy water sports among a crowd, or boat to some isolated, secluded place to picnic and frolic in restful solitude.

The huge 46,000-acre Grand Lake of the Cherokees sprawls out in all directions over miles and miles of northeast Oklahoma. Its shoreline and its peninsulas are dotted with countless private resorts catering to the sports and recreation minded. Swimming, water skiing, water bicycling, sail boating, cruising on big water sightseeing tours, boating in craft of all types are among

Within easy driving is a natural bridge, Chimney Rock and the Great Salt Plains. A new highway leads to the park and a cool picnic area is near the Cavern entrance.

Beavers Bend State Park is 1,300 acres of virgin land in the Kiamichi Mountains near Broken Bow in Southeast Oklahoma. Clear Mountain Fork River tumbles among mountain boulders, providing good water for artificial bait and fly anglers. A dam in the park area provides 7,000 feet of widened river for swimming, boating and fishing.

Deer are tame and friendly. The park

acre lake is well-stocked with black bass, crappie, walleyes and channel catfish. This lake, surrounded by forested hills and bluffs, is near Braggs about 20 miles southeast of Muskogee.

Lake Murray State Park in the old Chickasaw Nation, south of the Arbuckle Mountains, is an Oklahoma showplace. Midway between Ardmore and Marietta, this 21,000 acre playground was built exclusively for recreation. Water sports are king and fishing is tops.

Osage Hills State Park, between Pawhuska and Bartlesville, formerly was part of the Osage Indian Reservation.



The celebrated Oklahoma City Symphony Orchestra claims the distinction of having been heard by more people in the world than any other such group during the past 10 years, as a result of programs broadcast over the Armed Forces Network and the Voice of America. Guy Fraser Harrison is music director and conductor.

the pleasures to be enjoyed.

The abundance of conveniently located state parks in America's newest vacationland do much toward enhancing the state.

Alabaster Caverns State Park, in the Woodward-Freedom neighborhood of northwest Oklahoma, centers around the largest known gypsum cave in the world. Rock stairs lead to a room 200 by 400 feet, 70 to 80 feet in height.

boasts the greatest variety of birds to be found anywhere in the state.

Boiling Springs State Park is the only wooded area within a 100-mile radius on the rolling Oklahoma prairie. Near Woodward, in northwest Oklahoma, it was a favorite winter camping place both for the Plains Indians and the Spanish explorers of the sixteenth and seventeenth centuries.

Greenleaf Lake State Park's 1,475-

This park provides good boating and fine catches of bass, crappie, sunfish varieties, perch, mudcat and channel cat.

Quartz Mountain State Park is 11,000 acres of natural beauty on 7,000-acre Lake Altus in southwestern Oklahoma. Flags of five nations have flown over its granite hills. Here is typically western flora, such as mesquite, prickly pear, gaillardia, sunflower and

prickly poppy and the state's largest concentration of evergreen oak.

In the San Bois Mountains of eastern Oklahoma is the 8,400-acre beautifully forested Robbers Cave State Park. The cave once was a hangout of Belle Starr, notorious woman bandit, and according to tradition, also hid the James boys and other outlaws. Here is boating, swimming, lake and stream fishing and horseback riding over mountain trails.

Roman Nose State Park takes its name from the great Cheyenne warrior, who once lived on the site. Located near Watonga in the northwestern part of the state, Roman Nose is an ideal place

In the heart of the Cherokee Country Sequoyah State Park is on Fort Gibson Reservoir a few miles east of Wagoner. Good roads make it easily accessible through some of the loveliest scenery in Oklahoma. Near this park are many interesting historic points—the home of Sequoyah who invented the Cherokee alphabet, the reconstructed Fort Gibson frontier outpost and the Cherokee nation capitol.

Lake Wister State Park nine miles southwest of Poteau, is called the "Hub" of outdoor recreation in eastern Oklahoma. A 4,000 acre lake offers fishing and water sports, with picnic areas,

shoreline offer some of the nation's best fishing. Golfers will find a putting green, driving range and golf course adjacent to the lodge. An air strip accommodating executive type planes is close by.

Black Mesa State Park is actually a history-packed area rather than a single park. This northwest corner of Oklahoma's westernmost County, Cimarron, includes such points of interest as a dinosaur pit, the famous Old Santa Fe Trail, old Fort Nichols and the point where three states meet—Oklahoma, Colorado and New Mexico.

Great Salt Plains State Park is at the dam which creates 10,700-acre Great Salt Plains Lake. Surrounding the area are the miles and miles of dazzling white salt plains. The park is 7 miles north of Jet on a paved road.

Among other attractions are the rodeos which are held in Oklahoma, reminders of the state's western heritage, and the Will Rogers Memorial which has been erected at Claremore where the famous and beloved humorist was born. Thousands of visitors from all parts of the country come each year to visit the Will Rogers tomb and to go through the building in which his possessions and other mementoes of the West are displayed.

Other Amenities

Those in the know here say they doubt that any actual count of all the churches has ever been made, but nowhere has it been reported that there wasn't a church of a man's choice in his own neighborhood.

The reason for this is that faith in God is a cornerstone upon which Oklahoma was built. Faith imbued the missionaries who came into a new and rugged land to establish schools and churches for the Indians. And, it sustained settlers in Oklahoma Territory during the first lean years while they developed the claim they had staked during the land runs.

That faith has not waned as Oklahoma moved away from the pioneer society to take a place among the most progressive states of the Union. The state's churches have prospered as the people have prospered, and today there are building programs totaling millions of dollars underway at churches in all parts of the state.

In many rural communities the church is still the focal point for major activities, and in the cities of Oklahoma



for those who like to rough it and for those who want comfort.

Located on what many consider Oklahoma's most beautiful lake, Lake Tenkiller State Park is northeast of Gore and consists of three areas and a series of islands in the 12,500 acre lake which extends more than 30 miles through the spectacular hills. Fishing for bass, crappie, bream, and channel cat is outstanding.

a cafe, and boating. A few miles south is the Ouachita National Forest, and the region abounds in clear fishing streams like the Poteau and Black Fork Rivers, Fourche Maline, Buffalo and Long Creeks.

Between Durant and Madill, Lake Texoma State Park gives visitors access to the fourth-largest man-made lake in the world—95,400 acre Lake Texoma. Blue water and miles of cove-studded



Good modern highways lead into the beautiful mountain sections of Oklahoma. Here in the Wichita mountains near Lawton, one can visit the Federal Wild Life Refuge where one of the largest remaining herds of buffalo is maintained, and where the famous longhorn is preserved from extinction. The Wichita mountains are practically solid granite, with no geological patterns. Other mountain areas are the heavily wooded Ozarks in the northeast, the Ouachitas in the southeast, and the venerable Arbuckles in the south central section.

magnificent modern buildings, complete with educational and recreational facilities, have been constructed to meet the complex needs of present-day society.

Perhaps the best-known contribution by Oklahoma to world Christianity is the Sunrise Easter service presented annually near Lawton. Further comment is made on this elsewhere in this report.

Oklahoma also is a state of homes since, for the most part, the population of 2.3 million doesn't lean toward dwelling in apartments. This, too, has lent greater stability to Oklahoma as it is today.

To serve its residents Oklahoma has 179 hospitals strategically placed around the state, and cultural activities are a part of every city and community. Out-

standing in this category are the two nationally known orchestras—the Oklahoma City Symphony and the Tulsa Philharmonic.

An example of what may be found in the cultural picture of a progressive Oklahoma community may be seen at Norman, the home of the University of Oklahoma.

Local groups include the Men's Glee Club and the University Symphony. The Museum of Art at Norman has in its permanent collection 36 paintings by distinguished contemporary American artists, as well as many other groups of paintings and prints. In addition, traveling exhibits are shown continuously.

The Stovall Museum of Science and History has more than two million catalogued specimens which represent

archaeology, ethnology, history, botany, zoology and art.

In addition, the Celebrated Artists series presents five events each year, bringing to Norman some of the nation's finest musical and dramatic productions.

Football, of course, is a major attraction here, and the Big Red of Oklahoma University has been one of the nation's most successful teams. Owen Stadium here has a seating capacity of 65,000, and it is usually full for each of the Saturday afternoon games during the season.

The School System

Forming the foundation for a fine program of education in Oklahoma is a well organized system of more than 4,400 public schools, all modern, effi-



The beauty of Oklahoma's numerous lakes adds charm to the various water sports such as swimming, water skiing, water bicycling, sail boating, cruising on big water sightseeing tours, and boating in craft of all types. This is a scene on Lake Murray in the southern part of the state. Many new lakes will be created with the completion of the long-range Arkansas River Basin Development program.

cient buildings.

For higher education the state has 33 colleges, universities and junior colleges, 18 of which are state supported. The last census showed that Oklahoma ranked 14th among the states in the percentage of its young people attending colleges.

With its 10 degree-granting colleges, the University of Oklahoma attracts more than 10,000 undergraduate and 1,200 graduate students each year. In little more than 50 years the university has grown from a territorial school with 57 students to one of the leading institutions of higher learning. At present 99 major fields of study are available.

Important to long-range industrial planning for the entire southwestern area is the University's Research Park.

Companies may locate their research organizations here in permanent facilities planned by them, constructed and financed by the University of Oklahoma Research Institute, and occupied on a 20-year lease-rental contract.

Spacious grounds and controlled planning assure residents of the Research Park that neighboring facilities will be equal. The university provides a reservoir of trained manpower ready to assist with specialized research.

Of further interest to industry is the fact that the University's Numerical Analysis Laboratory is working on advanced programming for data processing and operations research.

Early in 1960 an ultra-high digital computer will be operational and available on a time-rental basis.

The University of Tulsa, related to

the United Presbyterian Church, U.S.A., is the largest privately-endowed university in Oklahoma. Offering both a wide field of educational opportunities and a variety of activities, the university attracts students not only from all over the nation but from many foreign countries.

Degrees are offered in the colleges of liberal arts, petroleum sciences and engineering and business administration, and in the school of music, school of law, graduate school and evening division.

Included in the activities are Air Force Officers' Training Corps, varsity athletics, music, drama and numerous social and interest groups.

Currently the University of Tulsa is in the midst of a 22-year master plan to increase the facilities for education and



Oklahoma's numerous lakes offer fishing to suit any angler. Varieties of fish caught include black bass, crappie, walleyes, channel cat, sunfish, mudcat and perch. This happy Isaac Walton is displaying a catch he made at Lake Texoma State Park between Madill and Durant.



Outstanding among medical facilities in Oklahoma is the new \$4.6 million Baptist Memorial Hospital in Oklahoma City. With its unusual, functional architecture, the hospital is one of the newest and best equipped such institutions in the Southwest.

extra curricular activities on the campus.

Norman itself has a population of 40,000 and is located just 18 miles south of Oklahoma City. The Norman Chamber of Commerce has made available a 50 acre tract for industry in an area where all necessary facilities are available. The Chamber also provides planning and design services for new plant facilities. These, in turn, may be constructed and financed through the Norman Industrial Development Foundation on a long-term lease-rental contract.

Vocational Training

In the field of vocational training, Oklahoma has established one of the nation's most advanced programs. The program was brought about through the cooperation of industrial advisory committees, vocational directors, the State Department of Trade and Vocational Education, the State Department of Commerce and Industry, and others.

The results of this cooperative effort are exemplified at Oklahoma State Tech at Okmulgee. The school is a branch of the Oklahoma State College at Stillwater.

The Okmulgee facility has 17 acres under roof, housing 35 different trades. Each trade was established at the request of associations or industries. Only those skills and theories are taught that have been recommended by industrial, agricultural and business leaders who meet on the campus regularly to key instruction to actual practical applications.

An interesting aspect of the program is that lack of previous education is no barrier. A student may come to the school with a college education, or, he may not even be able to read and write. In the latter case a special instructional method is employed to teach him the manual skills of his choice.

As a result of the individualized method of instruction, entrance requirements are flexible, and industrial advisors assist each student in choosing a particular vocational field he will enjoy and in which he can do a good job.

While Okmulgee A & M Tech is the only strictly vocational school in Oklahoma, there are many other vocational training sources established and constantly being developed in the colleges and universities, junior colleges and high schools.

Such things as short courses, night

schools and extension courses at various institutions are all keyed for the development of manpower to work in Oklahoma plants now and in the future.

In Oklahoma's school system as a whole, here's how the current enrollment situation shapes up:

There are approximately 376,809 children enrolled in elementary schools, from kindergarten through the eighth grade. The number in high schools is 136,388, making a grand total of 513,197 students enrolled in kindergartens and the twelve grades.

In the state's junior and senior colleges are a total of 58,734 students. A breakdown of the figures shows that 44,734 of these are in the 18 state-supported colleges, while 14,000 are in the 15 other colleges.

The Development Team

The Oklahoma Department of Commerce and Industry, of which Max Genet, Jr., is director, has a broad and aggressive program—some facets of which have already been covered in this report—and is ready, willing and able to give you considerable help in selecting a site in any part of the state.

For example, the Economic Development Act which established the department in 1955 provides that it "shall be the state's administrative agency for the encouragement and promotion of business, commerce and industry, within the state, and it is hereby authorized and empowered, under the direction of the Governor and the Governor's Economic Development Commission, to undertake and support such programs, and to develop information appertaining thereto, as will be conducive to that broad objective."

The Governor's Economic Development Commission was created under the same Act, and this group helps carry on the work of the Department. The Commission members include some of the leading industrial and professional figures in the state. They serve in advisory capacities on labor, industry and other economic problems to further the Department's activities.

The work of the Department is carried out by (1) the Economic (industrial) Development Division, (2) Research and Information Division, (3) Administrative Section and (4) Traffic and Rate Section.

The areas of activity in which the Economic Development Division operates are industrial prospecting, serving established industries, city planning, helping communities organize indus-



The University of Tulsa offers a wide field of educational opportunities and activities. It is the largest privately endowed university in the state and is related to the United Presbyterian Church, U.S.A. The group in the picture illustrates the variety of activities available at the institution.



Anywhere in Oklahoma you are near a church of your choice. Unique is the First Christian Church in Oklahoma City, known as the Church of Tomorrow, it was dedicated in December, 1956, and cost \$2.6 million. It has 3,600 resident members, and the sanctuary has a seating capacity of 2,000. The church also has educational and recreational facilities.

trial development corporations, and helping communities obtain proper economic data on their respective areas.

The Research and Information Division devotes considerable time to collecting information and preparing responses to a large flow of inquiries on Oklahoma's economic and cultural life.

The Division's staff also prepares material for and supervises these publications: *The Oklahoma Economic Development News*, the *Oklahoma Manufacturers Directory*, and *A Manufacturer's Guide to Oklahoma Taxes, Oklahoma State of Industry*, and others.

Informational films on industrial de-



Representatives of the research, planning, traffic and industrial divisions of the Oklahoma Department of Commerce and Industry confer on a program for the state's industrial development. Here (left to right) are Max Genet, Jr., department director; Estal Hart, director of industrial development; Bill Blackledge, traffic and rate specialist; Roy Lochart, Jr., director of research and information, and Jim Miles, urban planner. Other members of Mr. Genet's staff include: Bob Wolf and Tom Daniel, information specialists; John Conner and Robert Chandler, industrial development specialists; Carl Stevens and Bill Dickenson, industrial engineers.

velopment, which the division owns and has shown to groups all over the state, are "Gold Mine on Main Street" and "The Hugo Story."

The Transportation Section's major functions are, first, the dissemination of transportation rates, rules and regulations, and research into the freight rate structures affecting Oklahoma's economy; and, second, the creation and protection of a favorable climate for agriculture and industry in the state from a transportation cost standpoint by negotiation with the railroads, motor carriers and airlines.

Chief among the activities of the Administrative Section are leadership in and coordination of activities of the other divisions and sections of the Department to the end of the fulfillment

of the wide scope and industrial development of the state.

Other import promotional activities for the state are carried out by the Oklahoma Development Council. With headquarters in Oklahoma City, the council is headed by Clyde C. Cole, Jr.,

I. D. AREA SERIES

The accompanying editorial survey of plant location factors in the State of Oklahoma was conducted under the auspices of the Oklahoma Department of Commerce and Industry. Reprints are available from the Department, Oklahoma Farm Bureau Building, Oklahoma City, Oklahoma.

as executive director and R. K. Lane, Tulsa, current president.

An example of the Council's endeavors is an industrial tour of 10 communities in the Central Oklahoma area, which is scheduled for November 10-14, 1959. Purpose of the tour is to acquaint visiting industrialists with the potential of the area. The Oklahoma Development Council has some 2,000 members—business and professional men—representing 120 communities.

Help for the site seeker also is available from the industrial development departments of the Public Service Company of Oklahoma, Tulsa; Oklahoma Gas and Electric; Oklahoma State Chamber, from the individual communities all over the state, and from banks and railroads.

manufacturers record

THE NATIONAL MAGAZINE OF PLANT LOCATION NEWS

EXPANSION BRIEFS

ELIZABETH, N. J. Under construction for Reichhold Chemicals, Inc., is a \$5 million plant which will produce 30 million pounds of phthalic anhydride annually. Designed by Badger Manufacturing Company, the plant is scheduled to be in operation by the end of the year and will be one of the largest of its kind in the world.

HATO REY, PUERTO RICO. The first bakers' yeast plant to be established in Puerto Rico has been set up by Standard Brands. It is planned that the plant, to be operated by Standard Brands of Puerto Rico, Inc., will be in full production by July 1960. Initial output began in September. The facility will provide employment for 50 persons.

KANSAS CITY, MO. Western Electric will build a new plant near here on a 341-acre tract of land. The facility will be constructed in two stages. The first, upon which work will begin late in the fall, will comprise a \$12 million building with 600,000 square feet of floor space. It will employ more than 2,500 persons and will have an annual payroll of around \$12 million. Completion of the building is planned for early in 1962. The second phase, which could double capacity, is to be undertaken when the need arises.

FRESNO, CALIF. Ground has been broken here for new plant of Extruders, Inc., a wholly-owned subsidiary of Dow Chemical Company. To produce polyethylene film, the plant will cost \$2 million and will be on a 24-acre site. It ultimately will have 100 employees.

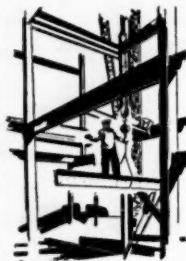
ISTANBUL. Construction will begin soon in this Turkish city on a new plant for the Singer Manufacturing Company. The facility will cost \$1.3 million and will employ 200 persons. To be completed late in 1960, the plant will produce 40,000 sewing machines annually.

NEW PLANT SUMMARY

BY DONALD V. QUINN

The following is a summary of major industrial plants reported to INDUSTRIAL DEVELOPMENT during the month of July, 1959, by industries and industrial development organizations in the United States, Canada, and territories.

Number of employees is indicated by the code: A (under 25); B (25-100); C (100-250); D (250-1,000); and E (over 1,000).



ALABAMA

Bessemer—W. S. Dickey Clay Mfg. Co.; Vitrified clay sewer pipe and other products. Est. date of Oper., Summer, 1960. \$Multi-million.

Butler—Little Page Sawmill; Sawmill. In Oper. \$200,000. (C)

Decatur—Minnesota Mining & Mfg. Co.; Herbert P. Buetow, Pres. Fluorochemicals. Est. date of Oper., Early 1961. \$4.5 million. 500-acre site. (B)

Naheola—Marathon Southern Corp.; John E. Spalding, Plant Mgr. Household tissues and napkins, specialty paper, toweling and light-weight paperboard. In Oper. 500,000 Sq. Ft. 1,100-acre site. \$Multi-million.

ALASKA

No plants reported.

ARIZONA

Chandler—Southwestern Nitrochemical Corp.; Lee Rice, Pres. Anhydrous ammonia (NH₃) Under Constr. Est. date of Oper., early 1960. 10-acre site.

Douglas—Dehydrated Foods, Inc.; A. R. Kenyon, Pres. Process onions and garlic, turning them into powder, and chopped and flake form. Plans announced. \$100,000. (B)

Phoenix—Fibreboard Paper Products Corp.; William L. Keady, Pres. Intergrated shipping containers. Convert paperboard into corrugated board for shipping containers. Under Constr. 200,000 Sq. Ft. Est. date of Oper., Jan. 1960.

ARKANSAS

Dermott—Sunnyside Terminal Co.; Lamar Grisham, Offl. Liquefied Petroleum Gas. Plans announced. \$500,000.

Fort Smith—Eads Furniture Mfg. Co.; Elmer Johnston, Offl. Upholstered living room furniture. Est. date of Oper., July 1959. \$25,000. (B)

Hot Springs—Conners and Hoffman Footwear, Inc.; Malvern Rd. Est. date of Constr. Sept. 1959. Est. date of Oper., Jan. 1960. \$310,000. 18-acre site. (D)

Lepanto—Bobbie Brooks Inc.; Maurice Saltzman, Pres. Dresses. In Oper. 20,000 Sq. Ft. (C)

Lepanto—Helena Garment Co.; Victor Juengle, Jr., Offl. Women's & Misses' Clothing. In Oper. \$125,000. (C)

Marshall—Marshall Mfg. Co.; Women's Dresses, Men's work shirts & trousers. Est.

date of Oper., Aug. 1959. 9,500 Sq. Ft. (C)

Stuttgart—Arkansas Grain Corp.; L. C. Carter, Gen. Mgr. Solvent-Process. Soybean Mill. Plans announced. \$1.6 million. (B)

West Memphis—International Basic Economy Corp.; Pneumatic and hydraulic valves. Est. date of Oper., August, 1959. (C)

CALIFORNIA

Brisbane—Hockwald Chemical Co.; S. S. Hockwald, Gen. Mgr. Bayshore Blvd. Chemicals. Plans announced. 65,000 Sq. Ft.

Burlingame—Phillips & Edwards Electric Corp.; F. A. Phillips, Offl. 1660 Rollins Rd. Electric Equipment. Est. date of Oper., 1960. 25,000 Sq. Ft.

Coyote Wells—National Gypsum Co.; Melvin H. Baker, Bd. Chmn. Produce gypsum wallboard, lath, sheathing and plaster for home construction. Plans announced. \$10,000,000. (D)

Fresno—Wilkerson & Nutwell, Inc.; A. B. Wilkerson, Pres. Snow plow equipment. Plans announced. \$750,000. 24-acre site.

Los Angeles—Airline Welling and Engineering; Byron H. Russell, Pres. 159th and San Pedro Sts. Precision welding positioners and related tooling. Under Constr. Est. date of Oper., Oct. 1959. \$150,000. 38,000 Sq. Ft.

Los Angeles—Herman Bros.; Lankershim Blvd. Sheetmetal and heating and air conditioning fabrication. Under Constr. 17,000 Sq. Ft. Est. date of Oper., Aug. 1959.

Los Angeles—Lockheed Aircraft Corp.; Courtlandt S. Gross, Pres. Administrative and scientific hdqtrs. Electronics and avionics division. Est. date of Oper., Summer, 1960. 200-acre site. (E)

Mountain View—Fairchild Semiconductor Corp.; Dr. Robert Noyce, V. Pres. and Gen. Mgr. 545 Whisman Rd. Transistors. In Oper. Est. date of Full Oper. 1960. 120,000 Sq. Ft. 10-acre site. (E)

Mountain View—Sylvania Electronic Systems; Samuel Ferguson, Div. V. Pres., and Gen. Mgr. Microwave tube research and development. Under Constr. 39-acre site. 40,000 Sq. Ft. Est. date of Oper., early 1960.

Palo Alto—Micro Wave Electric Corp.; Stanley F. Kaisel, Pres. 4061 Transport Street. Micro Wave Devices. In Oper. 10,000 Sq. Ft. \$500,000.

Palo Alto—Micro Wave Engineering Laboratory; Hillview Ave. Micro Wave receivers and components. Est. date of Oper., Dec. 1959. 33,000 Sq. Ft. 15-acre site. \$750,000. (C)

San Francisco—Industrial Air Products Co.; Welding wire. Under Constr. \$70,000. 15,000 Sq. Ft.

San Jose—Metro Metal Products Co.; Mr. Steve Walsh, Pres. 331 Terraine St. Metal

NEW PLANTS

control Lab. Cast alloys of aluminum, aluminum-bronze, bronze, Manganese-bronze, copper, beryllium-copper and stainless steel. Sand-casting. In Oper. 24,000 Sq. Ft. (B)

South San Francisco—American Bosch Arma Corp.; 300 Shgw Rd. Chas. W. Perelle, Pres. Engine Fuel injection Equipment. Plans announced. 27,000 Sq. Ft.

COLORADO

Great Western Aggregates, Inc.; T. C. Brown, V. Pres. & Gen. Mgr. Lightweight aggregate. Plans announced. \$Multi-million.

CONNECTICUT

Old Saybrook—R. R. Donnelley & Sons; Harold A. Schwanbeck, V. Pres. Magazine printing. 125,000 Sq. Ft. Under Constr. 30-acre site. \$10 million. (D)

DELAWARE

No plants reported.

DISTRICT OF COLUMBIA

No plants reported.

FLORIDA

Callahan—Worth Mfg. Co.; Jos. C. Worth, Owner. Prefab Components. Est. date of Oper., June 1959. 30,000 Sq. Ft. (B)

Deland—Pozzolite, Inc.; Aggregate & surface mining. Plans announced. \$650,000. (B)

Ft. Lauderdale—Southern Coil & Electric Co., Inc.; Hiram Ferencik, Offl. 917 N. W. 1st St. Portable radio assembly. Est. date of Oper., July 1959. (B)

Jacksonville—Diversified Products Co.; Mr. Spring, Mgr. Boat trailer parts. Est. date of Oper., July 1959. 12,000 Sq. Ft. (B)

Jacksonville—Orchid Glass Co.; George Cohen, Offl. Fused ink printing on glass. In Oper. \$100,000. 12,000 Sq. Ft. (B)

Jacksonville—Southern Maid Plastic Co.; Wayne Mills, V. Pres. Plastic bags & wraps. Est. date of Oper., Aug. 1959. (C)

Leesburg—Universal Sewer Pipe Corp.; Pipe. Plans announced. \$2 million.

Live Oak—Florida Rock Products Corp.; Jack G. Endsley, Temp. Supt. P. O. Box 570. Coarse & fine crushed stone aggregate. Under Constr. (C)

Miami—Willman Mfg. Inc.; G. R. Williams, Pres. Men's Sportswear. In Oper. (B)

Oldsmar—Redmer Air Devices, Inc.; E. A. Redmer, Pres. Screw machine products. Est. date of Oper., June 1959. (B)

Orlando—Cal Flo Co., Inc.; Robert A. Kelley, & James Sheetz, Plant Offls. Profiling & Machine work. Est. date of Oper., July 1959. 5,000 Sq. Ft. (B)

Panama City—Automatic Machinery Co.; Harry D. Frueaff, Jr., Pres. Light aluminum forging & screw machine products. Est. date of Oper., July 1959. (B)

GEORGIA

Atlanta—Purex Corp.; Liquid bleach.

NEW PLANTS

Under Constr. 30,000 Sq. Ft. Est. date of Oper., Jan. 1959.

St. Marys—Kraft Bag Corp.; Paper converting. Multiwall and grocery bags. Under Constr. 300,000 Sq. Ft.

Vidalia—The Rosebud Mfg. Co., Inc.; Ladies under-garments. In Oper. 13,000 Sq. Ft. (C)

Waycross—Waycross Sportswear, Inc.; Golf jackets. In Oper. 12,000 Sq. Ft. (B)

HAWAII

Ewa—Plastic Products, Inc.; Kenneth N. Gatzemeyer, Pres. Plastic cups. Est. date of Oper., Sept. 1959. \$100,000. (B)

IDAHO

Payette—Payette Plywood Corp., Inc.; A. V. Kinney, Gen. Mgr. Plywood Mfg. Est. date of Ope., Sept. 1959. \$250,000. (B)

ILLINOIS

Chicago—Flick-Reedy Corp.; Frank Flick, Pres. York and Thorndale. Industrial hydraulic and air cylinders and pipe-tread sealing nuts. In Oper. \$2.3 million. 220,000 Sq. Ft.

Chicago—Kadison Laboratories, Inc.; Sylvan Kadison, Pres. Spice, food flavorings, and additives. Under Constr. \$500,000. 29,000 Sq. Ft.

Chicago—Universal Battery Co.; Albert H. Cohn, Pres. Battery Manufacturing. Under Constr. 75,000 Sq. Ft. 3½-acre site. \$1,250,000. (B)

Chicago—Waco Mfg. Co.; Henry P. Albrecht, Pres. 9555-9557 Irving Park Rd. Basketball backstops, gymnasium equipment and playground equipment. Prefabricated concrete forms. Est. date of Oper., late Summer, 1959. 48,000 Sq. Ft. \$300,000. 2½-acre site.

Elk Grove—Precision Transformer Corp.; M. S. Adler, Pres. Transformers. Under Constr. \$500,000.

Hinsdale—International Harvester Co.; Frank W. Jenks, Pres. Farm equipment research and engineering center. In Oper. \$5 million. 455,000 Sq. Ft. (E)

Northfield—Stepan Chemical Co.; Alfred C. Stepan, Pres. Edens Expressway. Administration and research center. Est. date of Oper., Jan. 1960. 15-acre site. \$1 million.

Plainfield—Continental Can Co.; G. W. Carlson, Gen. Mgr. Rt. #59. Development and research on new methods for glass container mfg. construction. Plans announced. 11-acre site. \$1½ million.

Wilmington—Johnson & Johnson; Surgical goods. Plans announced. \$2.5 million. (D)

Wilmington—Personal Products Corp.; Rt. 66A. Personal Paper products. Est. date of Oper., June 1960. 200,000 Sq. Ft. (C)

INDIANA

Gary—E. J. Lavino Co.; High temperature brick. Plans announced. \$Multi-million. 35-acre site. (C)

Janesville—Virginia-Carolina Chemical Corp.; G. F. Flennike, Sales Mgr. Fertilizer. Under Constr. (B)

IOWA

Burlington—A. Geo. Schuts Co.; William Gaiselmann, Pres. Corrugated shipping containers, set-up paper boxes. Est. date of Oper., Spring 1960. 6-acre site. 20,000 Sq. Ft. (B)

Cherokee—R. J. Thomas Mfg. Co.; R. J. Thomas, Pres. Agriculture Equip. In Oper. 1-acre site.

Dyersville—Van Dale, Inc.; Mr. R. Olson, V. Pres. Silo unloaders & bulk feed loaders. Est. date of Oper., Aug. 1959. 30,000 Sq. Ft. (B)

Fairfield—Fairfield Engineering & Mfg. Co.; Ronald S. Blough, Pres. Automatic live-stock watering equipment. Est. date of Oper., Sept. 1959. 41,000 Sq. Ft. (B)

Hawarden—Otis Radio Inc.; Joe Otis, Pres. Coils for radio & TV. Est. date of Oper., Fall, 1959. 15,000 Sq. Ft. (C)

Waterloo—Kent Feed Co.; Feed. Est. date of Constr. early Fall, 1959. (B)

KANSAS

No plants reported.

KENTUCKY

Elizabethtown—Magnatronics, Inc.; Electronics. Under Constr. 40-acre site. 40,000 Sq. Ft.

Sulphur Springs—State Contracting & Stone Co.; Asphalt-mixing plant. In Oper. \$250,000.

LOUISIANA

Baton Rouge—Noralyn Paper Mills; John Gatti, V. Pres. Newsprint and semi-chemical pulp. Plans announced. \$40 million.

Chalmette—Tenn. Gas Transmission; Gardiner Symonds & John T. Brennan, Offls. Fuel Products. Est. date of Oper., May 1960. \$10.5 million. (A)

Lake Charles—Continental Oil Co.; Harold G. Osborn, Sr. V. Pres. Industrial alcohols produced from petroleum. Alcohol will be used for making detergents, plasticizers, cosmetics, lubricating oil additives, paper, textiles and emulsifiers. Under Const. Est. date of Oper., early 1961. \$Multi-million. (C)

Lake Charles—Falcon Chemicals; Jos. Churchman, Offl. Menthanol & Furfural. Est. date of Oper., Dec. 1959. \$275,000. (B)

New Orleans—Glazer Steel; Guildford Glazer, Offl. Non-ferrous metals & stainless steel. Est. date of Oper., Sept. 1959. \$222,000. (B)

Ruston—Lincoln Enterprises; Robert P. Brown, Offl. Picnic & Outdoor Equip. In Oper. \$56,618. (C)

Sterlington—Commercial Solvents; M. C. Wheeler, Offl. Dimethyl Ether. Est. date of Oper., Dec. 1959. \$184,555. (B)

MAINE

Lewiston—Raytheon Co.; Charles F. Adams, Pres. Transistors, diodes and rectifiers. Electronic items. Under Constr. Est. date of Oper., 1960. \$3 million. (E)

MARYLAND

Baltimore—E. I. Du Pont De Nemours &

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Windsor properties, inc.
Mercantile Commerce Building • Dallas, Texas

NEW PLANTS

Co.; Metallurgical research center. Development of metals for jet engines, rockets, missiles, and atomic reactors. Forge, extrude, roll, draw and heat-treat such refractory metals as niobium, tantalum, titanium, zirconium, tungsten and chromium. Est. date of Oper., Fall, 1960. (B)

Garrison—The Baltimore Spice Co.; Ralph A. Brunn, Ex. V. Pres. Grinds and Mfrs. spice and seasonings for meat packers, food processors, canners, bakers and pickle packers. Consumer products consisting of seafood seasonings, tenderizers and hickory charcoal seasonings for meats. Est. date of Oper., Dec. 1959. 45,000 Sq. Ft.

MASSACHUSETTS

Dedham—General Foods Corp.; Food distribution. Plans announced. 118,000 Sq. Ft.

Fitchburg—Fitchburg Paper Co.; George R. Wallace, Pres. Falulah Rd. Paper products. Research Center. Plans announced. 11½-acre site. \$1 million. (D)

Fitchburg—Wachusetts Potato Chip Co.; Potato Chips, etc. Est. date of Oper., Oct. 1959. 15,000 Sq. Ft. (B)

Monson—Springfield Moulder Inc.; Victor Rosenlund, Pres. Custom molders of plastic and vinyl. Est. date of Oper., Oct. 1959. (C)

Needham—Sylvania Electronic Systems, Inc.; J. W. Healy, V. Pres. Electronic products. Plans announced. 67,000 Sq. Ft. (D)

Wakefield—L. B. Evans & Son Co.; Shoe Mfg. Est. date of Oper., Late 1959. 21,000 Sq. Ft. (D)

Westboro—Hayes Leather Goods; Leather Products. Est. date of Oper., early 1960. 15,000 Sq. Ft. (B)

Winchester—Diamond Antenna and Microwave Corp.; Albert S. Hovannesian, Pres. Radar communications antennas. Est. date of Oper., Sept. 1959. 15,000 Sq. Ft. (B)

Worcester—Lowell Wrench Co.; Henry Cummings, V. Pres. Wrench manufacturing. Est. date of Oper., July 1959. 22,000 Sq. Ft. (B)

MICHIGAN

Gibraltar—Fabco, Inc.; R. B. Francis, Pres. Automobile parts & accessories. \$500,000. Under Constr. (B)

Grand Rapids—General Motors; James Gordon, Pres. Automobiles. Plans announced. \$700,000.

Rapid River—Upper Peninsula Refinery Co., Inc.; Thomas E. Lane, Pres. Oil refinery. Plans announced. \$300,000. (A)

St. Joseph—Whirlpool Corp.; Elisha Gray, II, Pres. Washing machines, etc. Under Constr. \$370,000. (E)

Saginaw—General Motors; James Gordon, Pres. Steering gear assemblies. Plans announced. \$Multi-million. 236,000 Sq. Ft. (E)

MINNESOTA

No plants reported.

MISSISSIPPI

Charleston—Charleston Mfg. Co.; Textile. Est. date of Oper., Late 1959. (C)

Flora—Stainless Ware Co. of America; Richard W. Lewis, Pres. & owner. Stainless

cookware. Studs and bolts for the aircraft industry. Outside trim and steel parts, for the automobile industry. Under Constr. \$2 million. (D)

Glenfield — Futorian-Stratford Furniture Co.; Springs for use in the manufacturing of upholstered furniture. Plans announced. \$200,000. 40,000 Sq. Ft. (C)

Holly Springs—Metalcraft Mfg. Co.; Wilson Golden, Pres. Electric appliances, insulated containers. Est. date of Oper., 1960. \$550,000. (C)

Olive Branch—Light & Power Utilities; Murray Reiter, Pres. Lightning fixtures. Est. date of Oper., 1959. (D)

Philadelphia—Wells-Lamont Corp.; Ernest Bowton, Mgr. Gloves. Est. date of Oper., early 1960. \$310,000. (B)

Vicksburg—U. S. Rubber Reclaiming Co.; Reclaimed rubber. Est. date of Oper., late 1960. (B)

MISSOURI

Glasgow—Hawthorne Finishing Co.; Kermit Plaege, Acc't. Tents, tarpaulins, sleeping bags, textile products. Plans announced. (B)

Neosho—Rocketdyne; W. E. Van Dyke, Dir. Pub. Rel. Rocket Engines. Plans announced. \$1 million. 13,600 Sq. Ft.

St. Louis—Keystone Plating Corp.; 3615 Forest Pk. Blvd. Modern Electro plating reconditioning auto bumpers. Plans announced. 35,000 Sq. Ft.

St. Louis—Lincoln Engineering Co.; 43000 Goodfellow. Automotive & Industrial lubricating equipment. Push button lubrication for cars. Plans announced. 187,000 Sq. Ft.

Shawnee—Haver-Lockhart, Inc.; Dr. Joseph F. Knappenberger, Pres. 12707 West 63rd St. Distribution and Mfg. Center. Pharmaceutical products. Plans announced. 60,000 Sq. Ft. 30-acre site.

Steelville—Erma's Gun Mfg. Co.; Harold Tucker, Raymond McConnell, Owners. M-1 Carbine rifles. Est. date of Oper., Sept. 1959. (B)

MONTANA

No plants reported.

NEBRASKA

No plants reported.

NEVADA

No plants reported.

NEW HAMPSHIRE

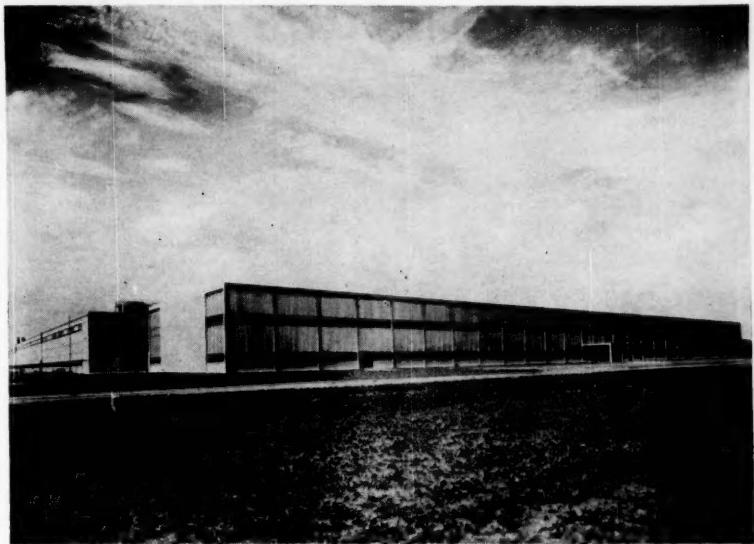
Manchester—Sylvania Electric Products, Inc.; Dr. William J. Pietenpol, V. Pres. & Gen. Mgr. of the Semiconductor Div. Transistors. Est. date of Oper., early 1960. 10-acre site. 25,000 Sq. Ft. (E)

Nashua—General Electronic Laboratories, Inc.; W. Hollis Street. Electronic equipment for the Defense Dept. and some commercial companies. Plans announced. Est. date of Oper., early 1960. 40,000 Sq. Ft. (C)

NEW JERSEY

No plants reported.

September, 1959



INTERNATIONAL HARVESTER COMPANY put into operation this July their new \$5 million Farm Equipment Research and Engineering Center at Hinsdale, Illinois. Containing more than 10 acres under roof, it presently employs over 1,300 scientists, engineers, technicians and skilled craftsmen.

NEW MEXICO

Artesia—Continental Oil Co.; Pipeline and terminal. Est. date of Oper., Nov. 1959. \$2.5 million.

Farmington—Creamland Dairies, Inc.; Gerald Hein, Mgr. Dairy Products. Est. date of Oper., Aug. 1959. \$400,000.

Rosario—Kaiser Gypsum Co.; Clyde E. Harper, V. Pres. & Gen. Mgr. Gypsum board. Est. date of Oper., June 1960. 94-acre site. \$3.5 million.

NEW YORK

Cheektowaga—Conax Corp.; Maurice W. Connel, Pres. 2300 Walden Ave. Thermo couples, seals, valves and missile components. Est. date of Oper., June 1960. (C)

NORTH CAROLINA

Cornelius—Samuel Hird & Sons; H. Edward Hird, Pres. Woolen fabrics used in making men's wear. In Oper. (D)

Greensboro—AMP, Inc.; Holt's Chapel Rd. Electrical Equipment—Electrical terminals. Plans announced. 30-acre site. (C)

High Point—Sackner-Southern Inc.; R. K. Schaefer, V. Pres. Upholstery specialties for the furniture industry. Est. date of Oper., Aug. 1959. 8,100 Sq. Ft. (B)

Salisbury—Republic Foil Co., Inc.; W. K. Hooper, V. Pres. Etched aluminum parts for use in TV sets, missiles and other electronic products. Est. date of Oper., Dec. 1959. 45-acre site.

NORTH DAKOTA

No plants reported.

INDUSTRIAL DEVELOPMENT

OHIO

Cairo—American Agricultural Chemical Co.; Sulfuric Acid. Est. date of Oper., March 1960. \$750,000.

Canton—The Buckeye Ribbon & Carbon Co.; Benton Rd. Processing of chemical solutions used in the operation of office duplicating machines. Est. date of Oper., May 1960. 59-acre site. \$2 million.

Cleveland—Schauer Bronze & Aluminum Foundry; Anthony Schauer, Pres. 3120 E. 80th Street. Non-ferrous, custom-made castings and high purity aluminum castings. Plans announced. 30,000 Sq. Ft. 1½-acre site. \$500,000.

Dayton—Commercial Tank & Welding Co.; Frank Dakin, Pres. Steel and alloy fabrications and some tank production. Est. date of Oper., Fall, 1959. \$200,000.

Holmesville—Buckeye Ribbon and Carbon Co.; J. B. Ward, Pres. Laboratory for processing of solutions used in office duplicating machines. Est. date of Oper., May 1960. \$2 million.

Mingo Junction—Wheeling Steel Corp.; Wm. Steel, Pres. Oxygen. Plans announced. \$6 million.

Ottawa—Sylvania Electric Products; Storage for new television picture tubes. Under Constr. 104,000 Sq. Ft.

Piqua—Champion Paper Specialties, Inc.; Sterling E. Brown, Pres. Cut-size business papers, decorated and embossed box wrap, gift wrap, and other specialties. Plans announced. 144,000 Sq. Ft. 13-acre site. (C)

OKLAHOMA

Nowata—Ellis Mfg. Co.; Production of uniform shirts and other contract clothing. Under Constr. (B)

Pryor—Oklahoma Cement Co.; A. J.

When PEOPLE make the difference — the decision is NORTH CAROLINA



A major expansion is now underway at the Kearfott plant opened in North Carolina in 1953.

ADAPTABILITY—Here North Carolina employees of Kearfott Company, Inc., are producing precision electrical components for the jet and missile age. Drawn from rural communities and trained for their present exacting job, they win this accolade: "Employees are of exceptionally high caliber, with a manifest desire to maintain a high level of efficiency, productivity, and product quality." F. D. Herbert, Jr., Executive Vice President, Kearfott Company, Inc., Black Mountain, N. C.

For confidential site information contact Wm. P. Saunders, Director, Dept. of Conservation and Development, Raleigh, North Carolina.

1,000,000

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That's right—over 42% of Michigan's labor force is skilled or semi-skilled in 365 different kinds of industrial operations, from tool-making to plastics. Man for man they produce a startling 16.3% more value than the average American industrial employee. And, most important to you, this huge, highly skilled labor force is available in the same place as a plentiful supply of economical natural gas. Michigan Consolidated Gas Company stores the gas year-round in Michigan's vast underground storage fields, assures you of reliable, low-cost fuel for industrial heating and processing. Consider, too, Michigan's uniquely central location to the nation's markets, and to the world via the St. Lawrence. Aren't these sufficient reasons at least to obtain confidential plant site information from our Industry Development Division, Detroit 26, Michigan?

MICHIGAN CONSOLIDATED GAS COMPANY

So much more for so much less—**GAS naturally**

NEW PLANTS

Anderson, V. Pres. Cement. Under Constr. \$7 million.

Tulsa—American Airlines; C. R. Smith, Pres. Jet maintenance and service center. In Oper. 1 million Sq. Ft. \$20 million.

OREGON

Columbia City—Crown Zellerbach Corp.; Sawmill—lumber. Plans announced. 200-acre site.

Hillsboro—Noblecraft Industries Inc.; Charles L. Noble, Pres. 630 SW Maple. Pre-finished and complete assembled hardware cabinets. In Oper. \$130,000. 18,000 Sq. Ft.

Tigard—Irvington Machine Works; E. W. Dekoning, Pres. Lumber and Surfacing Machinery. Under Constr. Est. date of Oper., Jan. 1960. \$250,000. 14½-acre site. (B)

PENNSYLVANIA

Athens—Ingersoll Rand Co.; Pneumatic & Electric Tools & Hoists. Plans announced. \$5.5 million. (D)

Carpentertown—Carpentertown Coal & Coke Co.; Coke Manufacture. Plans announced. \$3.5 million. (C)

Exton—Foote Mineral Co.; L. G. Bliss, Pres. Research and engineering; Lithium and lithium chemicals; Electrolytic manganese, zirconium and hafnium; ferro-alloys and minerals. Under Constr. \$2.2 million. (C)

Hastings—Hastings Footwear Corp.; Shoes. Plans announced. \$180,000. (C)

Lansdale—Lansdale Tube Co.; Silicon Transistors. Under Constr. \$3.5 million.

Lock Haven—Bobbie Brooks Inc.; Maurice Saltzman, Pres. Ensembles, blouses and skirts. Plans announced. 50,000 Sq. Ft. (D)

Oakes—Container Corp. of America; Research center. Plans announced. \$1.3 million.

Paoli—Penn-Flex Metallic Tubing Co.; Metal hose & couplings. Plans announced. 50,000 Sq. Ft. \$400,000.

Philadelphia—McNeil Laboratories; Robert L. McNeil, Jr., Chmn. Administrative facilities. Also research and production of pharmaceutical items. Under Constr. Est. date of Oper., Fall 1960. 300,000 Sq. Ft. 89-acre site. (D)

Philadelphia—Motor Cargo Inc.; Office & Dock facilities. Plans announced. \$250,000. (B)

Philadelphia—West Wholesale Drug Co.; Warehouse. Plans announced. \$500,000.

Scranton—Associated Book Service, Inc.; Warehousing and distribution of books for publishing houses. Plans announced. \$800,000. 10-acre site. 150,000 Sq. Ft.

Selinsgrove—J. G. Ott Packaging, Inc.; Paper Board Boxes. Plans announced. \$275,000. (B)

Tullytown—Bristol Printing Co.; Newspaper & job printing plant. Plans announced. \$600,000.

PUERTO RICO

No plants reported.

RHODE ISLAND

No plants reported.

NEW PLANTS

SOUTH CAROLINA

Catawba—Bowater Carolina Corp.; Hardboard. Under Constr. Est. date of Oper., Beginning of 1960. \$7 million. (C)

Florence—Crown Cabinet Co.; William Dufee, Pres. Darlington Hwy. Modular and custom kitchen cabinets. In Oper. 20,000 Sq. Ft. (B)

Hartsville—Sonoco Products; Laminated, pitch impregnated pipe. Plans announced. \$350,000.

Spartanburg—P. Garvan Inc.; J. Bond Garvan, Pres. Buys, processes and sells mill ends and waste for conversion into writing papers and other products. Under Constr. 75,000 Sq. Ft. \$750,000. (C)

Sumter—The Mackie Worsted Mills; Henry D. Mackie, Pres. Woolen yarn and knitting yarns for production of men's wear. Est. date of Oper., Aug. 1959. 26,000 Sq. Ft. (B)

SOUTH DAKOTA

No plants reported.

TENNESSEE

Chattanooga—Dayton Rubber Co.; 1803 Crutchfield St. Furniture cushion fabricating. Under Constr. 16,000 Sq. Ft.

Johnson City—Imperial Furniture Co.; Dining and bedroom furniture. Est. date of Oper., Nov. 1959. 200,000 Sq. Ft. \$800,000. 25-acre site. (D)

Kingsport—American Saint Gobain Corp.; Otto G. Schwenk, Pres. Polished glass. Est. date of Oper., 1962. \$45 million. (E)

Lewisburg—Cathey Furniture Mfg. Co.; Furniture. In Oper. 15,380 Sq. Ft. (B)

McMinnville—Century Electric Co.; Red Road. Small electric motors. Plans announced. 25-acre site. 100,000 Sq. Ft. (D)

Milan—Milan Products Corp.; William R. Worboys, Pres. Light furniture. In Oper. (B) Mt. Pleasant—Bob Roy Co., Inc.; Boys shirts. In Oper. (C)

Nashville—Dickson Mfg. Co.; Hwy. #46. Garments. Plans announced. \$250,000. (C)

Nashville—Firestone Tire and Rubber Co.; Harold S. Laird, Mgr. Thompson Lane. Warehouse, offices, and display space. Plans announced. 4-acre site. 37,000 Sq. Ft.

Sunbright—Van Buren Shirt Co.; Shirts. Plans announced. 11,500 Sq. Ft. (C)

D. Houser, Pres. 1515 Studemont St. Neon signs, and electrical contracting. Under Constr. 11,000 Sq. Ft. (B)

Richardson—Bauer Aluminum Co.; Art. G. Bauer, Pres. North Central Expressway & Spring Valley Rd. Architectural shapes such as window sections, curtain walls, thresholds, parts for truck trailers and rod, bar and tubing for general usage. Est. date of Oper., Nov. 1959. 17,200 Sq. Ft. (B)

UTAH

No plants reported.

VERMONT

No plants reported.

VIRGINIA

Galax—P. H. Hanes Knitting Co.; P. Huber Hanes, Jr., Pres. Men's and Boys' underwear, babywear, sleepwear, sportswear and knitwear. Est. date of Constr., Fall, 1959. \$1 million. 150,000 Sq. Ft. 27-acre site. (D)

Portsmouth—Holiday Industry: Aluminum Christmas trees. Under Constr. 17,000 Sq. Ft. (C)

South Boston—United States Plywood Corp.; Particle board used for closet and cupboard doors, table and counter tops and wall panels. Plans announced. 40-acre site. 80,000 Sq. Ft. (C)

TEXAS

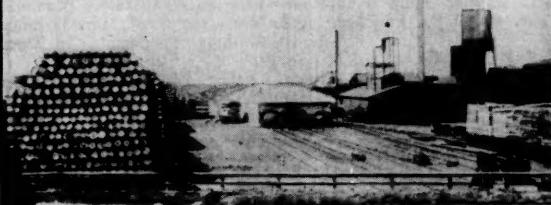
Channelview—Downey Mfg. Co., Inc.; C. J. Downey, Pres. Bayou Rd. Kitchen cabinets. Under Constr. \$300,000. 22-acre site. 12,800 Sq. Ft.

Dallas—Dynacolor Corp.; William J. Brown, Pres. 3221 Halifax. Photographic and industrial chemicals. Under Constr. Est. date of Oper., Oct. 1959.

Fort Worth—Acushnet Process Co.; Richard B. Young, Pres. U. S. Hwy. 80. Seals, diaphragms and other products for oil well drills and pumps. Plans announced. 12-acre site. \$250,000. 100,000 Sq. Ft. (B)

Houston—Houser Neon Sign Co.; George

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Cross Ties
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Docks for Ocean Vessels



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New Orleans, La.

Plants at Pensacola, Fla.; Slidell, La.; Winfield, La.; Louisville, Miss.; Jackson, Tenn.

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HANDBOOK**

1959-1960 edition

Your 1959-1960 copy of the Site Handbook will be off the press in mid-October. You will find completely up-to-date listings of all organizations offering site location aid in the United States, Canada and Puerto Rico.

Every member of your firm concerned with planning new facilities should have a copy of this important reference book. Pre-publication price: \$2 per copy. After publication: \$3 per copy. Order extra copies today!

to be published in

OCTOBER



EDITORIAL SURVEYS . . . and plant location reports

Since before the turn of the century MANUFACTURERS RECORD has issued special studies of specific cities and areas to assist the site-seeking industrial firm. Today, through the combined coverage of INDUSTRIAL DEVELOPMENT and MANUFACTURERS RECORD this tradition of leadership in this field is being extended and carried forward.

Before you go site-seeking, take advantage of background studies which have already been prepared for the areas listed below. Generally, reprints are available gratis.

Area	Date
Niagara Frontier	Aug., 1959
Canada	Aug., 1959
Ohio River Valley	Jul., 1959
Columbus, Ohio	June, 1959
St. Louis Area	May, 1959
Iowa	Apr., 1959
Puerto Rico	Mar., 1959
Washington, D. C. Area	Feb., 1959
Cleveland Corridor	Jan., 1959
West Texas	Jan., 1959
Rome and Floyd County, Ga.	Dec., 1958
Sacramento	Nov., 1958
North Carolina	Oct., 1958
Orange County, Calif.	Sept., 1958
Erie County, Pa.	Aug., 1958
New Bedford, Mass	Aug., 1958
Lower Va. Peninsula	July, 1958
Mattoon, Ill.	June, 1958
Florida Bay Area	June, 1958
Western Mississippi	May, 1958
Savannah Ga., Area	May, 1958
Knoxville, Tenn.	April, 1958
Charleston, S. C.	March, 1958
Dallas, Tex.	Feb., 1958
Louisiana	Jan., 1958
Cobb County, Ga.	Jan., 1958
Arizona	Dec., 1957
Pennsylvania	Sept., 1957
Canada	Aug., 1957
Petersburg, Va.	Aug., 1957
Southwest, Ga.	July, 1957
Charlotte, N. C.	Feb., 1957
Meridian, Miss.	Jan., 1957
Little Rock, Ark.	Oct., 1956

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NORTH ATLANTA 19, GA.
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NEW PLANTS

WASHINGTON

Kelso—Tollycraft Corp.; R. M. Tollefson, Pres. Boats. Under Constr. \$182,000. 5-acre site. (B)

Seattle—Puget Sound Bridge & Dredging Co.; Robert E. Gross, Chmn. Lockheed Arcti. Corp. Ship building, ship repair, large construction. Est. date of Constr. 1959. \$Multi-million.

Vancouver—National Can Co.; Can Manufacturing. Under Constr. Est. date of Oper., Fall 1959. 125,000 Sq. Ft. \$450,000. (C)

Vancouver—Treeco Veneers, Inc.; Slicing Hardwood veneers. Plans announced. (B)

WEST VIRGINIA

Weirton—Air Products Co.; Oxygen. Plans announced. \$6 million.

Wheeling—Valley Camp Coal Co.; O. B. Pryor, V. Pres. Coal mine. Est. date of Oper., 1963 or 1964. \$8 million. (D)

WISCONSIN

Kohler—Kohler Co.; Herbert V. Kohler, Pres. Rotary-type engines, mobile generating units. Under Constr. 500,000 Sq. Ft.

Milwaukee—A. O. Smith Corp.; L. B. Smith, Pres. Pressure vessels, heat exchangers. Under Constr. 80,000 Sq. Ft.

Montillo—American Woodworking Co.; Gustave Ehnborn, Pres. Wooden products. Est. date of Oper., Aug. 1959. 21,500 Sq. Ft.

Neenah—Neenah Foundry Co.; E. J. Aylward, Pres. Castings. Under Constr. 48,000 Sq. Ft.

Waukesha—Hein-Werner Corp.; John D. Watson, Pres. Hydraulic back hoes. Under Constr. 12,000 Sq. Ft. (B)

WYOMING

No plants reported.

CANADA

ALBERTA

Calgary—Consolidated Mining & Smelting Co., Ltd.; Urea. In Oper. \$5 million. (B)

Calgary—Coyco Products Inc.; Rockyview—52 Street S.E. Heat transfer equipment. In Oper. 44-acre site. 40,000 Sq. Ft. \$250,000. (B)

Calgary—Firestone and Rubber Co. of Canada Ltd.; Hwy. #2. Tire Manufacturing. In Oper. 53-acre site. 160,000 Sq. Ft. \$8 million. (D)

Calgary—Jefferson Lake Petrochemicals (Canada) Ltd.; H. Manlet, V. Pres. 133 6th Ave. S. E. Sulphur Extraction from sour natural gas. Est. date of Oper., 1960. \$20 million. (B)

Calgary—ParaGlas Ltd.; 42 Ave. S.E. & 15 Street. Insulated window units. 1-acre site. In Oper. 7,000 Sq. Ft. \$35,000. (B)

Calgary—Tri-Provincial Mineral Distr.; 427 51 Ave. S.E. Peat soil conditioner. In Oper. ½-acre site. 10,000 Sq. Ft. (A)

Calgary—Western Aluminum Products Ltd.; Forest Lawn. Aluminum doors & windows. In Oper. ½-acre site. 30,000 Sq. Ft. \$200,000. (B)

BRITISH COLUMBIA

Dawson Creek—W. H. Malkin Co., Ltd.; Wholesale groceries. Distribution warehouse. In Oper. \$500,000.

Delta—Powell River Co. Ltd.; Fine papers. Book, bond, ledger, and writing paper. Under Constr. \$6 million. (B)

MANITOBA

NEW BRUNSWICK

NEW FOUNDLAND

NOVA SCOTIA

No plants reported.

ONTARIO

Don Mills—Creative Display Adv. Ltd.; 850 York Mills Rd. Point-of-purchase displays in wood, metal, plastic, glass, wire and card. In Oper. 30,000 Sq. Ft. (B)

Don Mills—Precision Packaging Co. Ltd.; Leslie Street. Custom Packaging. Under Constr. Est. date of Oper., July 1959. 18,000 Sq. Ft.

Etobicoke—La France Fire Engine and Foamite Ltd.; Coronet Rd. Fire engines and fire protection equipment. Under Constr. Est. date of Oper., Fall, 1959. \$360,000. 5-acre site. 41,000 Sq. Ft.

Etobicoke—Seabreeze Mfg. Ltd.; 66 Jutland Ave. Tape recorders and record changers, stereophonic sound systems and pre-recorded stereophonic tapes, record players, high fidelity equipment, AM and FM radio tuners and components, Transistor radios, electric fans, fan heaters and electric irons and fractional H.P. motors. Motors are for company use and the industrial market. Est. date of Oper., Aug. 1959. 5-acre site. 60,000 Sq. Ft. (C)

Hamilton—Firestone Tire & Rubber Co. of Canada, Ltd.; T. M. Mayberry, Pres. Tire Manufacturing. Est. date of Oper., Sept. 1960. \$8 million.

Maitland—Sogemines, Ltd.; Ammonium nitrate, nitrogen solutions, anhydrous ammonia and hydrogen. Est. date of Oper., early 1961. \$17 million. 300-acre site.

Toronto—Economics Laboratory (Canada) Ltd.; J. R. McKoskey, Prod. Mgr. 39 Edgar Street. Dishwashing compounds. In Oper. 12,000 Sq. Ft.

Toronto—Fanon Electronics of Canada Ltd.; Harold Rosen, Mgr. 431 King Street. Internal telephone systems, intercom systems, PAX units, and equipment for apartment house door answering and portable phonographs. In Oper. 5,000 Sq. Ft. (B)

Toronto—McKee Door of Canada Ltd.; Overhead type doors for commercial, industrial and residential use. Plans announced. 7½-acre site. 12,000 Sq. Ft.

Toronto—Marshall Specialty Co. Ltd.; Alliance Ave. Wire products such as dishwashing racks, shelves, advertising display stands and fixtures. Under Constr. Est. date of Oper., Sept. 1959. 20,500 Sq. Ft.

Toronto—War Amputations of Canada; 140 Merton Street. Key-Tag Service, hot stamping and engraving on a job lot basis,



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ask for a Registered Community Audit. This brief, but
comprehensive, form will help you assemble quickly
and easily basic community data.**

When you have a number of communities under consideration for a new plant site, comparative data on all of them is often difficult to assemble. The Registered Community Audit is the answer to this problem!

No "form" can answer all your questions or provide enough data for a site decision. However, by having standardized data available in comparative form, you can quickly eliminate obviously unsuitable locations.

This Registered Audit is a free service conceived by Conway Publications as a service to both industry seeking locations and communities which seek industry.

A number of area groups such as state development

agencies, public utilities and railroads have undertaken to distribute and verify audits of communities which they serve. These groups, as well as Conway Publications will have copies of each community's Audit for confidential distribution to interested firms. The communities themselves, of course, will make copies available also.

If you are considering several possible communities and need preliminary information . . . ask for a Registered Community Audit. You may address inquiries directly to communities, area developers or Conway Publications.

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a free service to site-seeking industry

CONWAY PUBLICATIONS

NORTH ATLANTA 19, GA.

NEW PLANTS

producing such items as name plates for desks and doors, and office building and bank identification plates. Est. date of Oper., late Fall. 22,000 Sq. Ft. (B)

Toronto—Wedlock Paper Bag Co. Ltd.; & Purity Fibre and Foil Products Co. Ltd.; Stanfield Rd. Standard and specialty paper bags, paper plates, and aluminum foil containers. Under Constr. Est. date of Oper., Jan. 1960. 38,500 Sq. Ft. 4½-acre site. (B)

PRINCE EDWARD ISLE

QUEBEC

No plants reported.

SASKATCHEWAN

Regina—International Harvester Co. of Canada Ltd.; Parts and service Depot. Est. date of Oper., early 1959. \$330,000.

Saskatoon—Goodyear Tire and Rubber Co. of Canada; Warehouse. Under Constr. 50,000 Sq. Ft. \$500,000. (B)

FOREIGN

Argentina—Buenos Aires. Heinrich Meyer GmbH: Cellulose. Est. date of Oper., 1961. \$1.5 million.

Australia—Altona. Australia Synthetic Rubber Co. Ltd.; Styrenebutadiene rubber.

Est. date of Oper., July 1961. \$11 million.

Brazil—Sao Paulo. Cobrasma Rockwell Eixos S/A; Truck axles and gears. In Oper. 250,000 Sq. Ft. \$10 million. (D)

Egypt—Societe Swiss-Pharma; Pharmaceutical Products. Under Constr. \$1.5 million. Italy—Turin. Robertshaw-Italia S.p.A.; Luigi Dolza, Gen. Mgr. Automatic Thermo-static control devices. Plans announced.

Mexico—Tampico, Tamaulipas. Pigmentos y Productos Quimicos, S.A. de C.V.; Senor Manuel Espinosa Yglesias, Pres. Titanium dioxide. Est. date of Oper., April, 1960. 51 million pesos.

Switzerland—Zurich. McCormick, S.A. Hans Beck, Dir. and Gen. Mgr. Weinberger Strasse 9. Spices and extracts. In Oper.

Thailand—Merck & Co.; Pharmaceutical plant. Plans announced. \$1.5 million.

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NEW LONG-TERM LOAN PLAN TOLD FOR GROWTH FIRMS

CHICAGO. The new long-term (5-year) capital financing plan for manufacturers, announced last March by Commercial Discount Corporation of Chicago, has met with "an overwhelming response" from growth companies in the Manufacturing industry, Sidney Feuchtwanger, president, announced.

This financing, with a minimum of \$100,000 and a maximum of \$1 million to any one firm, has resulted in long-term loans to four companies in the Manufacturing field, totaling \$940,000. Additional capital loan applications from the industry are pending, Feuchtwanger said. Growth companies have found this type of financing particularly helpful in meeting the tight bank credit situation.

The plan differs from short-term bank lending in that the term may run to five years if desired by the borrower. No share of ownership or profits or voice in management, is desired by Commercial Discount. This new type of capital loan is based on potential earnings power rather than the value of fixed assets of the borrower, or the equity in the business. The usual type of business loan collateral is required, however.

Major emphasis in the new loan program is on growth possibilities in manufacturing. What Commercial Discount looks for in a borrower is a history of company profits, ability to repay the loan, plus expansion possibilities and proof that the new funds will be put to constructive use.



Yes, Ma'am.

Parkinson's Woods, an undeveloped parcel of property where your children sometimes play, will have to be rezoned to accommodate a new industry which is interested in your town.

"New industry", says the lady, unbelieving, "We don't want any old smokestacks in *our* part of town. Put 'em on gravel hill!"

The understandable—but misinformed—attitude of this young lady is one of the most difficult problems confronting the industrial and community official today. The problem is one of educating citizens to the needs of industry and the community for top-quality industrial property and the necessity for orderly planning and zoning. When a new zoning hearing comes up, there is almost always misunderstanding and confusion on the part of property owners who feel that they will be hurt.

Communities, firms and individuals who are confronted with this problem of "citizen education" now have a useful tool for its solution in the form of a new, 16mm full-color sound motion picture entitled:

"Blueprint For Progress"

BLUEPRINT tells the whole story of Parkinson's Woods and how the citizens learned, step by step, the way the area had been planned for growth and how the community learned about the opportunities it offered them.

The film is *not* an industrial planner's training film. It is an interesting, dramatic story of what planning and zoning is, why it is vital for the orderly growth of any community and how Mr. and Mrs. Citizen can help their officials and industry map out a "blueprint for progress".

- BLUEPRINT FOR PROGRESS runs about 26 minutes and is cleared for television showing.
- Copies of BLUEPRINT are offered for sale at a price low enough for any community or firm to own one.
- We will be happy to send you a preview print at no obligation for your personal inspection. Please address your request to:

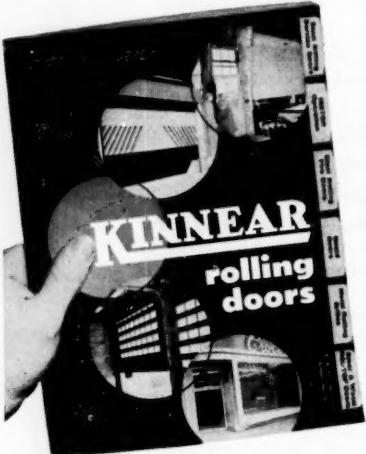
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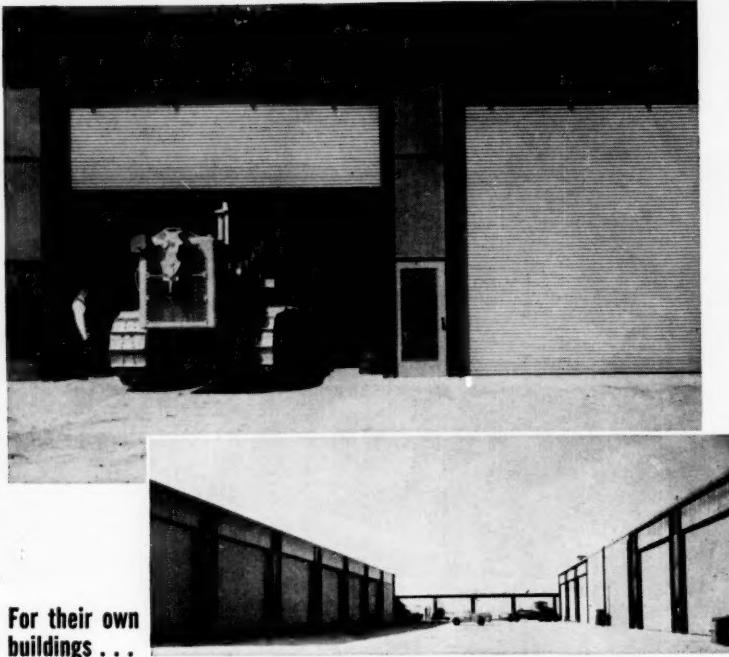
KINNEAR Rolling Fire Doors—the exclusive, all-steel "Akbar" doors, famous for positive starting action, safe closing speed, other advanced features.

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KINNEAR Motor Operators—Special, rugged, heavy-duty motors that add time-saving push-button control to the many other advantages of upward-acting doors.

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KINNEAR Rol-Top Doors—Sectional doors (wood or all-steel) available paneled for glass in any number of sections.



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In addition, Kinnear Rolling Doors give added all-metal protection against wind, weather, fire, intrusion and vandalism. *Extra heavy galvanizing plus the special Kinnear Paint Bond* extend this protection through extra years!

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MANUFACTURERS RECORD

(IN REVIEW)



SEPTEMBER 1885

(AS ABSTRACTED MORE THAN 70 YEARS LATER)

BALTIMORE, MD.

BUSINESS IMPROVEMENT

There is at present writing every evidence of business improvement. Machinery business is never the first to feel the reaction after dull times, hence improvement is scarcely, in many instances not at all, felt in this branch. But it is clearly seen in textile and other industries, and had been felt long enough to warrant the assumption that it is not a mere spasmodic effect. It is impossible that business shall materially improve in a few of its branches without affecting the other branches. The gain will undoubtedly be slow, so slow as not to be noticeable from week to week. No one will be wise who expects a boom this fall or winter, but unless all ordinary signs show, an era of better times has begun. The period of depression has taught men caution, so happily the rush of business beyond the bounds of any hopes of permanency is not under any circumstances probable. It will be infinitely better for the country that the increase be slow and sure than that it come with a rush to leave a calm behind it. But while cautious, it is plainly evident that there is everywhere increased confidence, which of itself will have a good effect in helping to restore business to a healthy condition. In the iron business we note that in some instances the wages of workmen have been increased, and that in this as in nearly all other lines the inclination towards further reduction has almost entirely ceased. This is a most encouraging sign, as with better wages, or reasonable evidence that further reductions are not impending, the great army of workingmen, whose ability and willingness to purchase has a greater influence on general business than any other single condition, will buy more freely, and so assist in removing the brakes from the wheels of trade. There are in the iron trade industries, more inquirers; there is a fair prospect for business in steel rails, and most of the pipe mills are busy. Last, but of the first importance, the promise of good crops insures such a distribution of money as will spread the means of purchasing over all parts of the country. Let everyone take heart from the encouraging signs; if everyone goes to work as if the worst was over, we trust and believe that it will be found to be so.

IRON COSTS SETTLED

The cost of making iron in Alabama is now settled. There is no use figuring on the matter any longer. An Indianapolis editor has tackled the subject, and he presents his figures to show that iron can be made in Alabama at \$6.70 a ton, to which, he generously admits, "should be added the salaries of officers and interest on investment." Next!

CIRCULAR LETTER ISSUED

W. B. Belknap & Company, of Louisville, Kentucky, have issued a circular letter, in which they say: "The fall trade opens in

such large volume and with such fair prospects that we seem it advisable to remind our friends of the variety embraced by our stock of new and first-class goods." Attention is called in the circular to the various lines of hardware, bar iron, steel, etc., in which this firm are large dealers.

54TH ANNUAL EXHIBITION

The 54th Annual Exhibition of the American Institute, which opens on Wednesday next, the 30th, at the Institute Hall, Third Avenue, 63rd and 64th streets, New York, gives every indication of being vastly more interesting than any of its predecessors, if any criterion can be formed from the character of the entries made, and which are more numerous than usual.

The machinery department will be especially rich in novelties, and some extremely curious devices will be shown in which steam, electricity, gas and compressed air will be the motors. There will, too, be several new ventilators, or fans, of novel construction.

The department of household furniture will also afford a curious study, as many new and ingenious inventions are promised, that it is said, will entirely revolutionize the present method of house furnishing.

A combination organ, on which the organist can play automatically, and with the keys at one and at the same time, will also be another attraction, especially for all who are

lovers of music, while many novelties in pianos, musical boxes, and toys will also be shown.

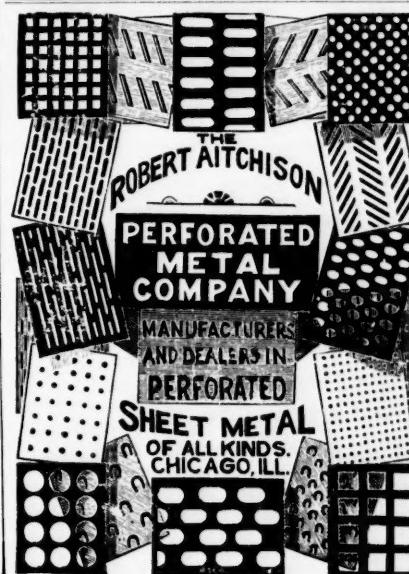
The other departments, especially that of Fine Arts, will be equally unique and interesting, while some marvelous inventions in the form of surgical and scientific instruments will create considerable stir.

INTERNATIONAL EXHIBITION

An International Exhibition of Navigation, Traveling, Commerce and Manufactures, will be held in Liverpool in 1886, with the Prince of Wales as president. It will be devoted to exhibits of everything that pertains to these subjects; including under manufactures being minerals of all kinds and their uses; cutlery, tools, general hardware, textile goods, manufactures of wood, etc. A very handsome 16-page circular, giving some of the preliminary arrangements, has just been issued. It can be obtained from Mr. Dennis Donohoe, British Consul at Baltimore.

WATER WHEEL CATALOGUE

James Leffel & Co., Springfield, Ohio, have published a very handsome catalogue of 128 pages, devoted to illustrating and describing their well-known water wheels and the various uses to which they can be advantageously put. This book also contains a large amount of valuable information relating to the use of water power, water wheels, etc.



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Industrial Districts

The following planned industrial districts have sites available for immediate construction. Advantages offered by such districts are described in detail in the November-December issue, pages 6, 7, and 8.

Services offered are indicated by the following code: (A) Architect & Engineer; (C) Construction; (E) Electric Power; (G) Natural Gas; (F) Financing; (P) Paved Streets; (R) Rail Siding; (S) Sewers; (T) Telephone; (W) Water.

Iowa

IOWA "MANUFACTURING MEADOWS"—Clinton, Iowa (population 35,000), 138 miles west of Chicago on Mississippi River and Lincoln Highway (U. S. 30). 190 acres within city. Master plan by Skidmore, Owings & Merrill. Served by Chicago and North Western Railroad. Developed by Clinton Development Company, a civic-non-profit corporation. Chapel 2-4536. R. J. Stapleton, Managing Director. Services available: (a) (optional), (c), (e), (g), (f) (optional), (p), (r), (t), (w), restrictions.

Missouri

PAGE INDUSTRIAL CENTER—St. Louis-planned industrial park, developers—Page Industrial Center, Inc., 7811 Carondelet, St. Louis 5, Mo. Edward L. Bakewell, Realtor, CEntral 1-5555, on Rock Island lines. 60 acres with all services available on property. Restrictions.

Illinois

ILLINOIS INDUSTRIAL VALLEY: Cities of La Salle, Peru, Oglesby, Spring Valley, Ladd, DePue offer planned industrial sites. Excellent transportation via the Illinois River, 7 major railroads, numerous carriers, 2 U.S. Highways. Skilled workers. Power in abundance. Active ID organization to serve you. Robert Blomgren, Director, Box 446, La Salle, Illinois. Phone: CA 3-0227. Services: (a) optional, (c), (e), (f) optional, (g), (p), (r), (s), (t), (w).

IMPORTANT—when replying to classified advertisements with no address given, write ID Box Conway Publications, Inc., North Atlanta 19, Ga.

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INDUSTRIAL DEVELOPMENT

Georgia

METROPOLITAN ATLANTA—Five Industrial Districts offering planned sites of varying location, size, price. Services available: (A) optional, (C), (E), (G), (F) optional, (P), (R), (S), (T), (W). In your Southeastern plant or warehouse survey contact: F. Wm. Broome, Industrial Manager, DeKalb County C of C, 250 E. Ponce de Leon Ave., Decatur, Ga. (Atlanta phone, DRake 8-3691).

Available Sites

SUBURBAN ATLANTA—Sites of 3, 5, 10, 25, 50, 100 or more acres. All utilities and rail service in DeKalb County—Georgia's newest industrial area. 70% urban with more than 200 industries in industrial districts and individual tracts. For your new Southeastern plant or warehouse location—enquire and visit through F. Wm. Broome, Industrial Manager, DeKalb County C of C, 250 E. Ponce de Leon Ave., Decatur, Ga. (Atlanta phone, DRake 8-3691).

CANADA—Serviced Industrial Sites & Factories for Lease & Sale—Contact Industrial Commissioner, Richmond Hill, Ontario.

Near the Crowd—But Not in It

Middlesex County, N. J. 20 Miles from New York—50 Miles from Philadelphia. On U. S. No. 1, N. J. Turnpike and Mainline P.R.R. Write for Booklet.

Middlesex County Industrial Department
County Record Bldg., New Brunswick, N. J.

Personnel Placement

INDUSTRIAL PROMOTION ENGINEER—Thirty years' experience as a City, Community, State and Real Estate Development Planner and Promoter. I wish to talk to communities that have a desire to become more attractive to Industries and better themselves economically. John Leon Hoffman, Registered Engineer and Planning Consultant. Phone 5271, Forsyth, Georgia.

Available Buildings

CHILDRESS, TEXAS—24,000 sq. ft.—completely sprinkled—1 story, all brick—concrete floor—R.R. siding and truck loading platform—13 ft. ceiling—very favorable labor market—low rental. Write Childress Chamber of Commerce.

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A NEW SERVICE

Does your company want to enhance its prestige in the business world? Do your executives deserve wider recognition? Would you like to present a more impressive picture of your company's history and growth? Do you need an easily-readable current description of the facilities and services you offer? Would you like to have such a presentation prepared by an outside group with objective viewpoint and wide experience in business reporting? Interested? Then contact the publishers of INDUSTRIAL DEVELOPMENT and MANUFACTURERS RECORD to discover how our professional staff can serve you.

Editorial Survey Department
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295 Madison Avenue, New York
or
109 Market Place, Baltimore
or
North Atlanta 19, Georgia

RATE INFORMATION

CLASSIFIED RATES: \$4 per line for 1-time insertion, \$3 per line for 12-time insertion. Estimate about 40 spaces in each line, allowing for box number.

PROFESSIONAL CARD & SIR RATES: \$30 per column inch for 1-time insertion, \$23 per column inch for 12-time insertion.

BOX NUMBERS: Publisher will assign box and relay correspondence on a confidential basis if desired.

PROOFS: Not furnished on classified ads.



This Mailing List Can Serve You!

The banks of address plate trays holding the names of INDUSTRIAL DEVELOPMENT readers represent years of compilation effort. Today, this list includes 16,000 key executives, including more than 8,000 company presidents in the East and Midwest. Write for details of mail service plan whereby you may use these plates to address your direct mail promotion material.

CIRCULATION DEPARTMENT
Conway Publications, Inc., North Atlanta 19, Ga.

RECE LEASES

By Suzanne Johnson

GENERAL REPORTS

The Location of the Synthetic-Fiber Industry by Joseph Airov. This is an excellent technical approach to selection of the most suitable site for a processing industry. It is precisely the type of analysis which is so badly needed throughout the field of plant location.

Using the concepts of regional economic analysis and location theory the author predicts the regional distribution of this industry's future growth, and estimates the possibilities of expansion in terms of employment and capital investment. He reviews the development and use of production functions, identifies market and supply areas, discusses techniques for estimating regional cost differences, and analyzes cost computations to determine minimum cost regions and sites. John Wiley & Sons, Inc., 440 Fourth Avenue, New York, N. Y. 198 pages. \$9.75.

New Life For Cities Around the World edited by J. Marshall Miller. This handbook on urban renewal is a compilation of the proceedings, selected papers, reports, supplementary and graphic materials prepared or assembled in conjunction with the first International Seminar on Urban Renewal, held in The Hague, August, 1958. Books International, 1186 Broadway, New York, N. Y. 224 pages.

Airports For Jets by Major John E. Peterson. This is an authoritative publication by an officer in the United States Air Force who also has a master's degree in city planning. It contains extensive factual material and gives requirements and criteria for the location and design of civilian jet airports, the operational characteristics of jets, their effect on the community and the new travel trends.

Major Peterson's research in the field of jet transportation and its impact includes information obtained directly from pilots, airline operators, aircraft manufacturers, and government control agencies. American Society of Planning Officials, 1313 East 60th Street, Chicago, Illinois. 86 pages. \$2.50.

A Directory of Industry Wage Studies and Union Scale Studies, 1950-58 Bureau of Labor Statistics, Washington 25, D. C. 20 pages.

A Directory of Community Wage Surveys, 1948-June, 1958. Bureau of Labor Statistics, Washington 25, D. C. 16 pages.

AREA REPORTS

Planning the Establishment of an Industrial Plant by Ruddell Reed, Jr. This bulletin is prepared to provide a method of preliminary research and planning for small firms. Illustrated by examples of potential enterprises the work carries on to show the results of preliminary re-

search for these enterprises. Florida Engineering and Industrial Experiment Station, University of Florida, Gainesville, Florida. 17 pages.

An Interindustry Study of the Sabine-Neches Area of Texas by C. D. Kriksey. Bureau of Business Research, University of Texas, Austin, Texas. 141 pages. \$2.00.

Plant Location Guide for Small Manufacturers in Haverhill, Massachusetts. Haverhill Industrial Council, 191 Merrimack Street, Haverhill, Massachusetts. 28 pages.

Things Are Humming in Hollywood, Florida. A packet of information sheets containing pertinent facts regarding plant location. Industrial Commission, Chamber of Commerce, Hollywood, Florida. 30 pages.

Ground Water Development In the Arid Western United States. With special reference to Salt Lake County conditions by Dr. Jerry Tuttle, Utah Economic and Business Review, July, 1959. Bureau of Economic and Business Research, University of Utah, Salt Lake City, Utah. 8 pages.

Hawaii, 1959. This booklet gives brief answers to those questions which are most frequently being asked about Hawaii. Superintendent of Documents, Government Printing Office, Washington 25, D. C. 30 pages. 15¢.

Facts and Figures . . . on Louisiana Industry. A packet of reprints from several national publications featuring Louisiana. Department of Commerce and Industry, P. O. Box 4185, Baton Rouge, Louisiana.

Western Resources Handbook. The twenty-seventh issue of data sheets. Western Resources Handbook, Stanford Research Institute, Menlo Park, California. 35 pages.

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Beginning in October INDUSTRIAL DEVELOPMENT will publish a special professional card section devoted to professional developers. For information regarding this special section please write to this magazine.

EXPANSION PLANNING INDEX

For prompt assistance with your planning problems, consult these alert advertisers who are represented in this issue of ID-MR:
PLANT LOCATION SERVICES:

Alabama Power Company, C. H. Kilian, Advertising Manager, 600 N. 18th St., Birmingham, Ala. (Ad page 82).

Arkansas Industrial Development Commission, William P. Rock, Executive Director, State Capitol, Little Rock, Ark. (Ad 4th cover).

Baltimore and Ohio Railroad Company, John Collins, General Freight Agent, Baltimore & Charles Sts., Baltimore 1, Md. (Ad page 4).

Greater Burlington Industrial Corporation, Charles P. Townsend, Executive Director, 191 College Street, Burlington, Vt. (Ad page 5).

Carolina Power and Light Company, D. E. Stewart, Manager, Area Development, Insurance Bldg., Raleigh, N. C. (Ad page 76).

Florence Chamber of Commerce, Harry W. Hiott, Jr., Executive Vice President, City Hall Annex, Florence, S. C. (Ad page 5).

Georgia Power Company, Gene A. Yates, Jr., Manager, Industrial Development Division, P. O. Box 1719, Atlanta, Ga. (Ad page 15).

Grand Central Industrial Centre, W. M. Clough, Vice President, P. O. Box 3157, Grand Central Station, Glendale 1, Calif. (Ad page 1).

Index! C. B. Thornton, Jr., Promotion Manager, Rm. 214, Municipal Bldg., Roanoke, Va. (Ad page 5).

Kansas, Oklahoma and Gulf Railroad, W. A. Carpenter, Vice President, Industrial Development, Muskogee, Okla. (Ad page 75).

Kingsport Chamber of Commerce, Inc., A. B. Coleman, Executive Vice President, 226 Commerce St., Kingsport, Tenn. (Ad page 36).

Knoxville Chamber of Commerce, Charles F. Herd, Industrial Director, Hotel Andrew Johnson, Knoxville 2, Tenn. (Ad page 5).

Lawton Chamber of Commerce, Milton Keating, P. O. Box 777, Lawton, Okla. (Ad page 39).

Michigan Consolidated Gas Company, R. L. Gage, Manager, Industrial Development Division, 415 Clifford St., Detroit, Mich. (Ad page 78).

Mississippi Agricultural and Industrial Board, Henry Maddox, Director, 1504 State Office Bldg., Jackson, Miss. (Ad 2nd Cover).

Monroe Area Industrial Development Corporation, James S. Williams, Executive Vice President, Virginia Hotel Bldg., Monroe, La. (Ad page 3).

ID SECRET SITE SERVICE

There may be sound reasons why you should wish to obtain preliminary information on possible sites without revealing your interest or identity. Recognizing this, INDUSTRIAL DEVELOPMENT offers a Secret Site Service to readers who hold positions of responsibility with manufacturers or other business firms having a legitimate interest in sites. Complete information, including site specification forms, will be sent promptly and confidentially at your request. Address SECRET SITE SERVICE, Conway Publications, Inc., North Atlanta 19, Georgia.

Muskogee Chamber of Commerce, Inc., Paul A. Bruner, Manager, Muskogee, Okla. (Ad page 40).

New York Central System, W. J. Marshall, Industrial Department, 466 Lexington Ave., New York, N. Y. (Ad 3rd cover).

State of North Carolina, Department of Conservation and Development, William P. Saunders, Director, Raleigh, N. C. (Ad page 78).

Puget Sound Power and Light Company, Stewart G. Neel, Manager, Area Development, 860 Stuart Bldg., Seattle 1, Wash. (Ad page 86).

St. Petersburg Chamber of Commerce, Jack Bryan, Director, Industrial Development, 4th St. and 3rd Ave., St. Petersburg, Fla. (Ad page 38).

Southern Railway System, B. E. Young, Assistant to President, 15 and K Sts., N.W., Washington 13, D. C. (Ad pages 10 and 11).

Southwestern Electric Service Company, E. W. LeNeveu, Mercantile Bank Bldg., Dallas, Texas. (Ad page 3).

Texas Power and Light Company, J. D. Eppright, Director of Industrial Development, P. O. Box 6331, Dallas, Texas. (Ad page 2).

Virginia Electric and Power Company, Clark P. Spellman, Manager, Area Development, 7th and Franklin Sts., Richmond, Va. (Ad page 12).

Windsor Properties, Inc., W. C. Windsor, Jr., President, 2828 Southland Center, Dallas 1, Texas. (Ad page 76).

PLANT CONSTRUCTION AND INDUSTRIAL SERVICES:

American Creosote Works, Inc., S. B. Braselman, Jr., Vice President, 1305 Dublin St., New Orleans, La. (Ad page 79).

A. J. Gerrard and Company, Ralph Wyckoff, Advertising and Sales Promotion Manager, 1962 Hawthorne Ave., Melrose Park, Ill. (Ad page 16).

The Kinnear Manufacturing Company, Wallace Pearson, Vice President, 1191 Fields Ave., Columbus 16, Ohio. (Ad page 84).

OTHER SERVICES:

Industrial Sound Films, Inc., Guy H. Tucker, Director of Special Services, Conway Building, N. Atlanta 19, Ga. (Ad page 83).



The Colonel Says

Representative Brooks Hays of Arkansas, addressing a large group recently, described how he was taught public speaking at college. "At the beginning of the course," he said, "each of us was given a mouthful of marbles through which we had to speak. Every day we were allowed to reduce the number by one marble. We became accredited public speakers," added Hays, "as soon as we lost all our marbles."

WHO GHOST THERE?

A man missed the last bus from town and tried to hitch a ride by signaling several passing cars. Three passed without stopping, but the fourth was going slowly and as he approached, stopped, whereupon he entered very gladly. But, to his horror, no one was within driving the car which moved slowly on and finally came to a complete halt in front of cemetery. The neighboring church clock struck midnight at that moment, slowly and ponderously, and the young man, now thoroughly unnerved, leaped from the car and began to run. He looked back for an instant, however, and noticed a man apparently trying to enter the car. He cried out: "Don't get into that car, there's something terribly wrong with it."

To which the other replied disgustedly: "You're telling me? I've been pushing it all the way from town!"

SPRING CLEANING!

"Spring cleaning" was done on a really big scale this year. The particular "cleaning" involves the state taxpayer.

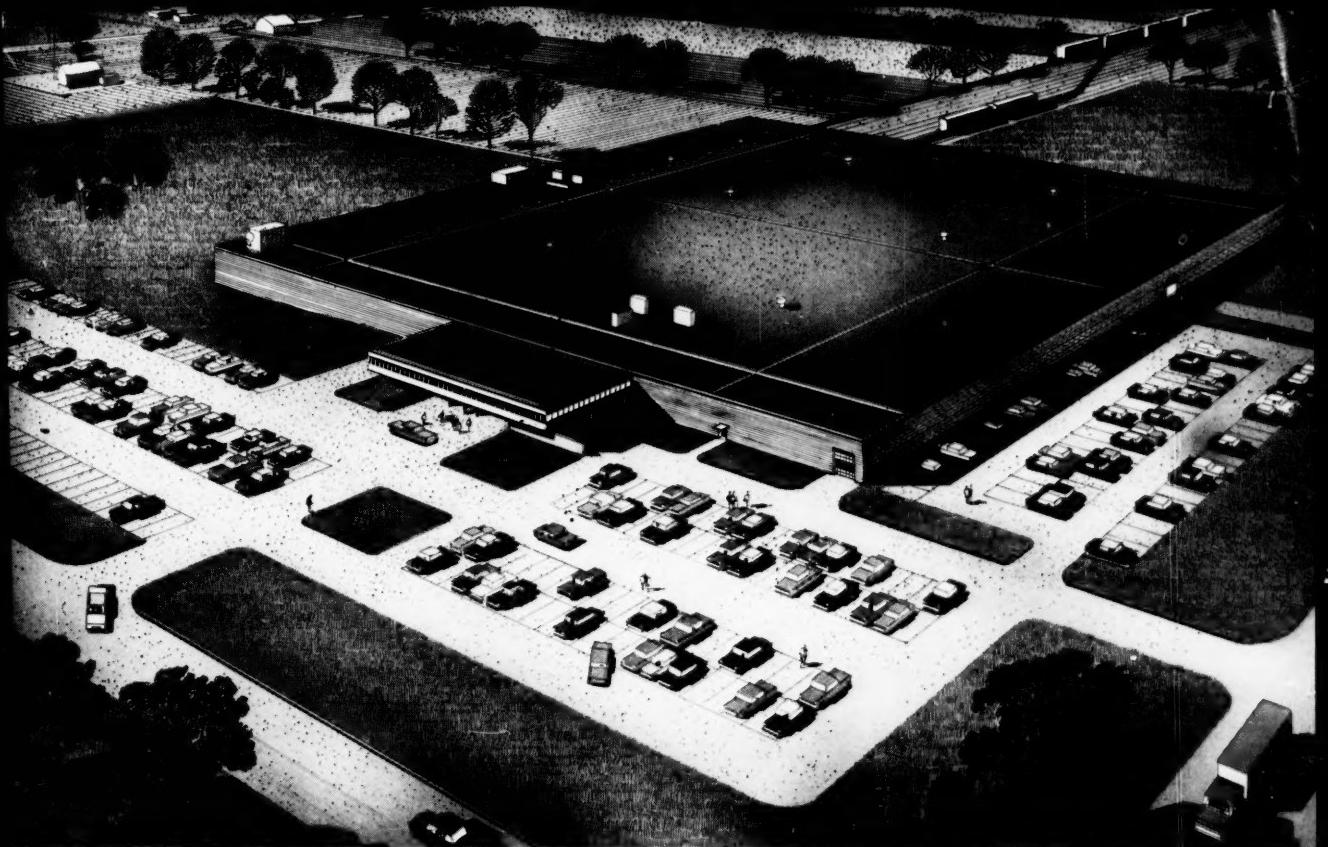
The Tax Foundation reports that the 45 state legislatures that have met or will meet during 1959 plan to levy up to \$1,500,000,000 in new or increased state taxes.

TOP BRACKET

The little boy wanted \$100 so badly he decided to pray for it. He prayed several weeks with no results. So he wrote God. The post office finally forwarded the letter to the White House. The President chuckled and ordered \$5 sent to the boy. The lad, delighted that his prayers had been answered, in part at least, wrote a thank-you note to God but added this P. S.: "I notice you routed my letter through Washington and as usual the bureaucrats deducted 95 per cent."

* * *

People who really mean what they say usually don't say a great deal.



Spartan Stores' efficient new distribution center, on a 36-acre tract which New York Central helped them find.

"Where?" asked Spartan Stores "Here," replied New York Central

Spartan Stores is a wholesale buying and distributing organization, owned by the 500 independent retail food stores it serves.

When Spartan's growth demanded greatly enlarged facilities, its management resolved that the new plant must be the last word in efficient planning. For advice on location, they turned to New York Central's Plant Site Consultants.

After analysis of where in-shipments came from, and where out-shipments went, along with many other considerations, Central recommended this 36-acre plot on the outskirts of Grand Rapids. Spartan moved in earlier this year and finds the location as ideally suited to its needs as is its new plant.

There is storage space for 1,250,000 cases of groceries. The refrigerated areas provide 400,000 cubic feet for frozen foods; 360,000 cubic feet for perishables. A railroad siding runs into the huge building, and twenty-four cars can be unloaded simultaneously.

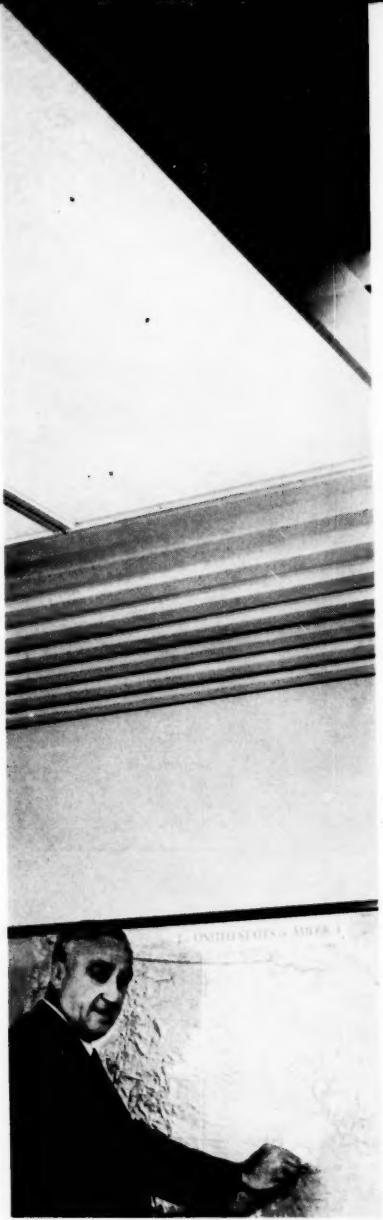
Plant site selection calls for the help of experts on many subjects—transportation, taxes, utilities, labor, water, ground conditions. Often you need the confidential services of someone who knows the community. All this is freely available to you at the Central.

Write to: Otto W. Pongrace, Director of Industrial Development, Dept. D, New York Central Railroad, 466 Lexington Ave., New York 17, N. Y.

Plant-Site Opportunities Illustrated brochures available:

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10. Gardenville, N. Y.
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